#### WAYNE STATE UNIVERSITY

Professional Record Faculty

NAME: Robert Francis Harr

DATE PREPARED: 8/21/95
DATE REVISED: 3/1/17

OFFICE ADDRESS: 262 Physics

HOME ADDRESS: 701 N. Oxford Road
Grosse Pointe Woods, MI 48236–1823

OFFICE PHONE: 313-577-2677 HOME PHONE: 313-702-1804

DEPARTMENT/COLLEGE: Physics and Astronomy / Liberal Arts and Science

PRESENT RANK & DATE OF RANK: Professor / August, 2010

WSU APPOINTMENT HISTORY:

Year Appointed/Rank: August 2010 / Professor

August 2003 / Associate Professor August 1996 / Assistant Professor

November 1995 / Assistant Professor Research

Year Awarded Tenure: August 2003

Year Promoted to Associate Professor: August 2003 Year Promoted to Full Professor: August 2010

CITIZEN OF: U.S.A.

EDUCATION: [Give name of institution, place, and date of degree.]

Baccalaureate: Carnegie-Mellon University, Pittsburgh, PA, May 1984.

Graduate: U.C. Berkeley, Berkeley, CA, July 1990.

Postgraduate (postdoctoral): Yale University, New Haven, CT.

# FACULTY APPOINTMENTS AT OTHER INSTITUTIONS (Years and Rank):

[Not administrative appointments; see below.]

1990 - 1994: Associate Research Scientist, Yale University.

1994 - 1995: Research Scientist, Yale University.

### PROFESSIONAL SOCIETY MEMBERSHIP(S):

American Physical Society American Association for the Advancement of Science Detroit Metropolitan Area Physics Teachers

## HONORS/AWARDS:

Fellowship, Superconducting Super Collider, 1993 - 1994.

WSU Faculty Research Award, 1997.

Visiting Scientist Honorarium, DESY Laboratory, Hamburg, Germany, 2000.

WSU College of Science Teaching Award, 2002.

Richard Barber Faculty Recognition Award, 2015.

# BIOGRAPHICAL CITATIONS (National/Regional or Professional Directories):

#### I. TEACHING

- A. Years at Wayne State 1996 - present.
- B. Years at Other Colleges/Universities (please list)
- C. Courses Taught at Wayne Sate in Last Five Years
  - 1. Undergraduate

Physics 2130 quiz: F12
Physics 2140 lecture: F13
Physics 5620 lecture & lab: F14
Physics 5210 lecture: W15

Physics 6850 lab: W17, W16, W15, W14

### 2. Graduate

Physics 6991 seminar: F14
Physics 8810: F16, W13
Physics 8991 PAN seminar W16

3. Graduate Professional School

# D. Essays/Theses/Dissertations Directed

1. Students by Name, Level, Title of Project, Year

Sangeetha Baskaran, M.S. (thesis), "Search for Fully Reconstructed W Boson Decay", May 2015.

Shalhout Zaki Shalhout, Ph.D., "Search for the Standard Model Higgs Boson in the Process  $ZH \to l^+l^-b\bar{b}$  in 4.1 fb<sup>-1</sup> of CDF II Data", February 2010.

Nagesh Kulkarni, Ph.D., "Analysis of D0-D0bar Mixing in D0 to K pi Decays Using the CDF II Detector", August 2009, co-advisor.

Daljit Dhaliwal, M.S. (thesis), "Calculation of Acceptance and Efficiency for  $D^0 \rightarrow e^+e^-$  and Rates of Pions and Kaons Faking Electron Signals at CDF", May 2006.

Jing-Ge Shiu, Ph.D., "Study of  $D^0 \to \mu^+\mu^-$  FCNC Decay at HERA-B", Feb. 2003.

# 2. Advising Presently:

Christopher Clarke: Ph.D. student

Kevin Siehl: Ph.D. student

Nabin Poudyal: Ph.D. candidate

## 3. Ph.D. Thesis Committees:

Chamath L.K.K.D., 2014

Sowjanya Gollapinni, 2012

Peng Zhou, 2012

Matt Taylor, 2011

Shalhout Zaki Shalhout, 2010 (chair)

Andriy Badin, 2010

Nagesh Kulkarni, 2009 (co-chair)

Alex Stopolsky, 2005

Jing-Ge Shiu, 2003 (chair)

Mark Buchler, 2002

## 4. Prospectus Committees:

Christopher Clarke, 2012 (chair)

Kevin Siehl, 2012 (chair)

Chamath L.K.K.D., 2011

Jocelyn Mlynarz, 2010

Sowjanya, Gollapinni, 2009

Peng Zhou, 2009

Matt Taylor, 2007

Andriy Badien, 2007

Shalhout Shalhout, 2007 (chair)

Nagesh Kulkarni, 2007

Alex Stopolsky, 2003

Jing-Ge Shiu, 2001 (chair)

Mark Buchler, 2000

### 5. Undergraduate Advisees

Ellen Holmgren, REU summer student from Kenyon College, Gambler OH, summer 2016.

Dillon Figzgerald, student assistant, summer 2014, AY 2014–2017; REU summer student, summer 2015.

Jarod Sawasky, UROP student, AY 2014–2015.

Christopher Balts, UROP student, AY 2014–2015.

Caleb Bowers, REU summer student from Hillsdale College, Hillsdale MI, summer and fall 2013.

Joseph Flanigan, REU summer student from Univ. Wisconsin, Milwaukee, summer 2012.

Geoffrey Fatin, REU summer student from SUNY Buffalo, summer 2012.

Haley Morris, REU summer student from Arkansas Tech., summer 2012.

Tyler Lazorka, REU summer student from Schoolcraft Comm. Coll., co-advised summer 2012.

Mark Schott, REU summer student, summer 2011; student assistant AY 2011–2013. Kristina Krylova, REU summer student from SUNY Buffalo, summer 2011.

Kellen McGee, REU summer student from Johns Hopkins, summer 2011.

Emmett Windisch, REU summer student, summer 2009; student assistant AY 2009–2010.

Jessica Oakes, student assistant AY 2008–2013; REU summer student, summer 2009 Erin Nagelkirk, student assistant, fall 2007 and AY 2008–11

Ron Gennaro, student assistant, winter 2007

# 6. High School Students and Teachers:

- 12 high school students and 2 high school science teachers in 2016 QuarkNet summer research.
- 12 high school students and 2 high school science teachers in 2015 QuarkNet summer research.
- 12 high school students and 2 high school science teachers in 2014 QuarkNet summer research.
- 4 high school science teachers in 2014 QuarkNet modern physics workshop.
- 12 high school students and 2 high school science teachers in 2013 QuarkNet summer research.
- 12 high school students and 2 high school science teachers in 2012 QuarkNet summer research.
- 30 high school students and 4 high school science teachers in 2012 QuarkNet MasterClass, March 10, 2012.
- 12 high school students and 3 high school science teachers in 2011 QuarkNet summer research.
- 15 high school students and 5 high school science teachers in 2011 QuarkNet MasterClass, March 19, 2011.
- 12 high school students and 5 high school science teachers in 2010 QuarkNet summer research.

Mentored 4 high school students and 2 high school science teachers during summers 2007 and 2008 as part of the QuarkNet summer research.

# E. Course or Curriculum Development

1996 Fall: I developed a new laboratory experiment on analog-to-digital conversion for the electronics lab of Physics 5550/5620.

2001 Winter: I developed a new laboratory experiment on digital-to-analog conversion and microprocessors for the electronics lab of Physics 5550/5620.

2004 Winter: I contributed a lecture to Dr. Dymetrenko's multimedia project for teaching classroom English to foreign instructors.

2006 Winter: Developed initial proposal for upgrade of electronics course, PHY 5550/5620, with P.K. Kuo and Z. Platis.

2006 Winter: Proposal for update of Physics undergraduate curriculum, with graduate committee.

2009 Summer: Member of the Qualifying Exam Review Committee

2014–2015: Reviewed new discussion sections as part of the oversight committee. With

S. Gavin, writing learning outcomes and assessments for Physics B.S. and B.A. degrees. Update of AFM experiment for advanced lab with P. Hoffmann and A. Sebastian. Review and update all the lab instructions for PHY5620 and PHY6850. Organizing and writing proposal for new experiments in PHY6850 advanced laboratory, and new robot–based experiments for PHY5620 electronics course.

2016–2017: Setup, checked out, and wrote lab guides for new Magnetic Susceptibility,

Ultrasound, SQUID Measurements, and Modern Interferometry experiments.

F. Course Materials (Unpublished)

I have placed detailed lecture notes on the web for Astronomy 2010, Physics 2130, 2140,

3100, 5200, 5210 (6200), 5620, 7060, 7600, 7610, and 8810. The notes are complete with worked examples, and are available at http://hep.physics.wayne.edu/~harr/

#### II. RESEARCH

- A. Research in Progress, Not Funded
- B. Funded Research in Last Five Years

Title: "URA Visiting Scholars"

PI/co-PIs: R. Harr, K. Siehl

Source: University Research Association

Period: 8/15 - 12/15

Amount: \$12,000 (\$12.000 share to R. Harr, PI) [award pays K. Siehl's GRA

stipend

Title: "Particle Physics Research Program / Task A"

PI/co-PIs: P. Karchin, R. Harr

Source: U.S. Department of Energy

Period: 4/15 - 3/18

Amount: \$910,000 (\$455,000 share to R. Harr, co-PI)

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Title: "Wayne State Activities with the Darkside Experiment"

PI/co-PIs: R. Harr

Source: Fermi National Accelerator Laboratory

Period: 6/14 - 12/14Amount: \$22,286

Title: "Quarknet"

PI/co-PIs: R. Harr, P. Karchin

Source: University of Notre Dame

Period: 10/12 - 9/15

Amount: \$14,315 (\$7,158 share to R. Harr, PI)

Title: "CC-NIE Network Infrastructure: Wayne State University"

PI/co-PIs: D. Cinabro, P. Gossman, R. Harr, C. Pruneau

Source: National Science Foundation

Period: 12/12 - 12/14

Amount: \$359,158 (infrastructure grant, no share)

Title: "Particle Physics Research Program / Task A"

PI/co-PIs: P. Karchin, R. Harr

Source: U.S. Department of Energy

Period: 5/12 - 3/15

Amount: \$1,089,000 (\$544,500 share to R. Harr, co-PI)

Title: "Quarknet"

PI/co-PIs: R. Harr, P. Karchin

Source: University of Notre Dame

Period: 10/10 - 9/12

Amount: \$30,000 (\$15,000 share to R. Harr, PI)

Title: "Wayne State Activities with the CDF Experiment"

PI/co-PIs: P. Karchin, R. Harr

Source: Fermi National Accelerator Laboratory

Period: 10/11 - 8/12

Amount: \$136,000 (\$68,000 share to R. Harr, co-PI)

Title: "Convener Teaching Release"

PI/co-PIs: R.F. Harr

Source: Fermi National Accelerator Laboratory

Period: 1/2011 - 12/2012

Amount: \$101,055

Title: "Particle Physics Research Program / Task A"

PI/co-PIs: P. Karchin, R. Harr

Source: U.S. Department of Energy

Period: 3/09 - 2/12

Amount: \$820,000 (\$410,000 share to R. Harr, co-PI)

C. Fellowships/Grants/Special Awards in Last Five Years

• 2015 Richard J. Barber Faculty Recognition Award

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### III. PUBLICATION

- A. Scholarly Books Published
  - 1. Authored
  - 2. Co-Authored
- B. Chapters Published
  - 1. Authored
  - 2. Co-Authored
- C. Editorships of Books/Proceedings
- D. Journal Articles Published

#### Refereed Journals

For papers from the CDF Collaboration, I have made significant contributions to the operation of the experimental apparatus and simulation of the apparatus, critical to all publications, as detailed at the end of this cv under "Other Professionally Related Service". Below each paper I will indicate additional contributions to the paper. Nagesh Kulkarni and Shalhout Shalhout are co-authors on basically all CDF papers published since 2008.

I was directly involved in the writing or production of the following papers:

- 1. "Measurement of the WZ production cross section in pp collisions at  $\sqrt{s} = 13$  TeV," V. Khachatryan et al. [CMS Collaboration], Phys. Lett. **B** 766, 268 (2017).
- 2. "Study of the energy dependence of the underlying event in proton-antiproton collisions", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D **92**, 092009 (2015)
- 3. "First measurement of the forward-backward asymmetry in bottom-quark pair production at high mass", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D **92**, 032006 (2015)
- 4. "Search for Supersymmetry Using Razor Variables in Events with b-Tagged Jets in pp Collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. D **91**, 052018 (2015)
- 5. "Search for production of an  $\Upsilon(1S)$  meson in association with a W or Z boson using the full 1.96 TeV  $p\bar{p}$  collision data set at CDF", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D **91**, no. 5, 052011 (2015)
- 6. "Measurement of electroweak production of two jets in association with a Z boson in proton-proton collisions at  $\sqrt{s} = 8 \text{ TeV}$ ", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C **75**, no. 2, 66 (2015)
- 7. "Measurement of differential production cross section for  $Z/\gamma^*$  bosons in association with jets in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV", T. A. Aaltonen *et al.* [ CDF Collaboration]. Phys. Rev. D **91**, 012002 (2015)
- 8. "Measurement of the  $B_c^-$  meson lifetime in the decay  $B_c^- \to J/\psi \pi^-$ ", T. Aaltonen et al. [CDF Collaboration]. Phys. Rev. D 87, 011101 (2013)
- 9. "Observation of sequential Upsilon suppression in PbPb collisions", S. Chatrchyan et al. [CMS Collaboration], Phys. Rev. Lett. **109**, 222301 (2012).
- 10. "Measurement of the difference of CP-violating asymmetries in  $D^0 \to K^+K^-$  and  $D^0 \to \pi^+\pi^-$  decays at CDF", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. **109**, 111801 (2012)

- 11. "Measurement of CP-violation asymmetries in  $D^0 \to K_S \pi^+ \pi^-$ ", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D **86**, 032007 (2012)
- 12. "Performance of CMS muon reconstruction in pp collision events at  $\sqrt{s}=7$  TeV", S. Chatrchyan et al. [CMS Collaboration]. JINST 7, P10002 (2012)
- 13. "Measurement of  $B_s^0 \to D_s^{(*)+} D_s^{(*)-}$  Branching Ratios", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. **108**, 201801 (2012)
- 14. "Evidence for the charmless annihilation decay mode  $B_s^0 \to \pi^+\pi^-$ ", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. **108**, 211803 (2012)
- 15. "Measurement of the branching fraction  $\mathcal{B}(\Lambda_b^0 \to \Lambda_c^+ \pi^- \pi^+ \pi^-)$  at CDF", T. Aaltonen et al. [CDF Collaboration]. Phys. Rev. D 85, 032003 (2012)
- 16. "Measurement of CP-violating asymmetries in  $D^0 \to \pi^+\pi^-$  and  $D^0 \to K^+K^-$  decays at CDF", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D **85**, 012009 (2012)
- 17. "Measurements of branching fraction ratios and CP-asymmetries in suppressed  $B^- \to D(\to K^+\pi^-)K^-$  and  $B^- \to D(\to K^+\pi^-)\pi^-$  decays", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D **84**, 091504 (2011)
- 18. "Measurements of the Angular Distributions in the Decays  $B \to K^{(*)} \mu^+ \mu^-$  at CDF". T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. **108**, 081807 (2012)
- 19. "Search for B(s) and B to dimuon decays in pp collisions at 7 TeV", S. Chatrchyan et al. [CMS Collaboration]. Phys. Rev. Lett. **107**, 191802 (2011)
- 20. "Measurement of Polarization and Search for CP-Violation in  $B_s^0 \to \phi \phi$  Decays", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. **107**, 261802 (2011)
- 21. "Observation of the  $\Xi_b^0$  Baryon", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. **107**, 102001 (2011)
- 22. "Observation of the Baryonic Flavor-Changing Neutral Current Decay  $\Lambda_b \to \Lambda \mu^+ \mu^-$ ", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. **107**, 201802 (2011)
- 23. "Search for  $B_s \to \mu^+\mu^-$  and  $B_d \to \mu^+\mu^-$  Decays with CDF II", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. **107**, 239903 (2011).
- 24. "Measurement of branching ratio and  $B_s^0$  lifetime in the decay  $B_s^0 \to J/\psi f_0(980)$  at CDF", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D **84**, 052012 (2011)
- 25. "Measurements of the properties of  $\Lambda_c(2595)$ ,  $\Lambda_c(2625)$ ,  $\Sigma_c(2455)$ , and  $\Sigma_c(2520)$  baryons", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D **84**, 012003 (2011)
- 26. "Measurements of Direct CP Violating Asymmetries in Charmless Decays of Strange Bottom Mesons and Bottom Baryons", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. **106**, 181802 (2011)
- 27. "Measurement of the  $B_s$  Lifetime in Fully and Partially Reconstructed  $B_s \to D_s^-(\phi \pi^-) X$ Decays in  $\bar{p}-p$  Collisions at  $\sqrt{s}=1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. **107**, 272001 (2011)
- 28. T. Aaltonen et al. [ CDF Collaboration ], "Improved Search for a Higgs Boson Produced in Association with  $Z \to l^+ l^-$  in proton antiproton Collisions at sqrt(s) = 1.96 TeV," Phys. Rev. Lett. 105, 251802 (2010).
- 29. T. Aaltonen et al. [ CDF Collaboration ], "Updated Search for the Flavor-Changing Neutral- Current Decay  $D^0 \to \mu^+\mu^-$ ," Phys. Rev. D82, 091105 (2010).
- 30. S. Chatrchyan et al. [ CMS Collaboration ], "Performance of CMS Muon Reconstruction in Cosmic-Ray Events," JINST 5, T03022 (2010).

- 31. S. Chatrchyan et al. [ CMS Collaboration ], "Performance of the CMS Cathode Strip Cham- bers with Cosmic Rays," JINST 5, T03018 (2010).
- 32. T. Aaltonen et al. [ CDF Collaboration ], "A Search for the Higgs Boson Produced in Association with  $Z \rightarrow l+l-$  Using the Matrix Element Method at CDF II," Phys. Rev. D80, 071101 (2009).
- 33. M. Antonelli, D. M. Asner, D. A. Bauer, T. G. Becher, M. Beneke, A. J. Bevan, M. Blanke, C. Bloise et al., "Flavor Physics in the Quark Sector," Phys. Rept. 494, 197-414 (2010).
- 34. T. Aaltonen et al. [CDF Collaboration], "Observation of the Omega(b)- Baryon and Mea- surement of the Properties of the Xi(b)- and Omega(b)- Baryons," Phys. Rev. D80, 072003 (2009).
- 35. T. Aaltonen et al. [ CDF Collaboration ], "Search for the Decays B0(s)  $\rightarrow$  e+ muand B0(s)  $\rightarrow$  e+ e- in CDF Run II," Phys. Rev. Lett. 102, 201801 (2009).
- T. Aaltonen et al. [CDF Collaboration], "Observation of New Charmless Decays of Bottom Hadrons," Phys. Rev. Lett. 103, 031801 (2009).
- 37. T. Aaltonen et al. [ CDF Collaboration ], "Search for the Rare Decays  $B+\to mu+mu-K+$ ,  $B0\to mu+mu-K*0(892)$ , and  $B0(s)\to mu+mu-phi$  at CDF," Phys. Rev. D79, 011104 (2009).

My full list of publications follows. Some of the papers listed above are repeated below.

- 1. "Search for heavy resonances decaying to tau lepton pairs in proton-proton collisions at  $\sqrt{s} = 13$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1702, 048 (2017)
- 2. "Search for R-parity violating supersymmetry with displaced vertices in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D, [Phys. Rev. D 95, 012009 (2017)]
- 3. "Search for top quark decays via Higgs-boson-mediated flavor-changing neutral currents in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1702, 079 (2017)
- 4. "Search for anomalous Wtb couplings and flavour-changing neutral currents in t-channel single top quark production in pp collisions at  $\sqrt{s} = 7$  and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1702, 028 (2017)
- 5. "Search for high-mass Z $\gamma$  resonances in e<sup>+</sup>e<sup>-</sup> $\gamma$  and  $\mu^+\mu^-\gamma$  final states in proton-proton collisions at  $\sqrt{s}=8$  and 13 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1701, 076 (2017)
- 6. "Search for supersymmetry in events with one lepton and multiple jets in proton-proton collisions at  $\sqrt{s} = 13$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 95, no. 1, 012011 (2017)
- 7. "Search for long-lived charged particles in proton-proton collisions at  $\sqrt{s} = 13$  TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. D 94, no. 11, 112004 (2016)
- 8. "Inclusive search for supersymmetry using razor variables in pp collisions at  $\sqrt{s} = 13$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 95, no. 1, 012003 (2017)
- 9. "Studies of inclusive four-jet production with two b-tagged jets in proton-proton collisions at 7 TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. D 94, no. 11, 112005 (2016)
- 10. "Search for high-mass diphoton resonances in proton–proton collisions at 13 TeV and combination with 8 TeV search", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 767, 147 (2017)

- 11. "Decomposing transverse momentum balance contributions for quenched jets in PbPb collisions at  $\sqrt{s_{\rm N~N}} = 2.76$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1611, 055 (2016)
- 12. "The CMS trigger system", V. Khachatryan *et al.* [CMS Collaboration]. JINST 12, no. 01, P01020 (2017)
- 13. "Measurement of the production cross section of a W boson in association with two b jets in pp collisions at  $\sqrt{s} = 8 \,\text{TeV}$ ", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 77, no. 2, 92 (2017)
- 14. "Measurement of the mass of the top quark in decays with a  $J/\psi$  meson in pp collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1612, 123 (2016)
- 15. "Measurement of the ZZ production cross section and  $Z \to \ell^+\ell^-\ell'^+\ell'^-$  branching fraction in pp collisions at  $\sqrt{s}$ =13 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 763, 280 (2016)
- 16. "Measurement of electroweak production of a W boson and two forward jets in proton-proton collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1611, 147 (2016)
- 17. "Measurement of the WZ production cross section in pp collisions at  $\sqrt(s) = 13$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 766, 268 (2017)
- 18. "Search for dark matter in proton-proton collisions at 8 TeV with missing transverse momentum and vector boson tagged jets", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1612, 083 (2016)
- 19. "Jet energy scale and resolution in the CMS experiment in pp collisions at 8 TeV", V. Khachatryan et al. [CMS Collaboration]. JINST 12, no. 02, P02014 (2017)
- 20. "Search for lepton flavour violating decays of the Higgs boson to  $e\tau$  and  $e\mu$  in proton–proton collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 763, 472 (2016)
- 21. "Observation of the decay  $B^+ \to \psi(2S)\phi(1020)K^+$  in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Lett. B 764, 66 (2017)
- 22. "Search for new physics in final states with two opposite-sign, same-flavor leptons, jets, and missing transverse momentum in pp collisions at sqrt(s) = 13 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1612, 013 (2016)
- 23. "Measurement of the differential cross sections for top quark pair production as a function of kinematic event variables in pp collisions at  $\sqrt{s}$ =7 and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 94, no. 5, 052006 (2016)
- 24. "Searches for R-parity-violating supersymmetry in pp collisions at  $\sqrt(s) = 8$  TeV in final states with 0-4 leptons", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 94, no. 11, 112009 (2016)
- 25. "Measurement of the WW and WZ production cross section using final states with a charged lepton and heavy-flavor jets in the full CDF Run II data set", T. A. Aaltonen et al. [CDF Collaboration]. Phys. Rev. D 94, no. 3, 032008 (2016) FERMILAB-PUB-16-229-E
- 26. "Evidence for collectivity in pp collisions at the LHC", V. Khachatryan et al. [CMS Collaboration]. Phys. Lett. B 765, 193 (2017)
- 27. "Measurement of the transverse momentum spectra of weak vector bosons produced in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1702, 096 (2017)
- 28. "Search for Resonant Production of High-Mass Photon Pairs in Proton-Proton Collisions at  $\sqrt{s}$  =8 and 13 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 117, no. 5, 051802 (2016)
- 29. "Phenomenological MSSM interpretation of CMS searches in pp collisions at sqrt(s) = 7 and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1610, 129 (2016)

- 30. "Measurements of the Higgs boson production and decay rates and constraints on its couplings from a combined ATLAS and CMS analysis of the LHC pp collision data at  $\sqrt{s}=7$  and 8 TeV", G. Aad *et al.* [ATLAS and CMS Collaborations]. JHEP 1608, 045 (2016) CERN-EP-2016-100, ATLAS-HIGG-2015-07, CMS-HIG-15-002
- 31. "Search for Dark Matter and Supersymmetry with a Compressed Mass Spectrum in the Vector Boson Fusion Topology in Proton-Proton Collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. Lett. 118, no. 2, 021802 (2017)
- 32. "Measurement of the W boson helicity fractions in the decays of top quark pairs to lepton + jets final states produced in pp collisions at  $\sqrt{s} = 8$ TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 762, 512 (2016)
- 33. "Search for top squark pair production in compressed-mass-spectrum scenarios in proton-proton collisions at sqrt(s) = 8 TeV using the alpha[T] variable", V. Khachatryan et al. [CMS Collaboration]. Phys. Lett. B
- 34. "Search for supersymmetry in pp collisions at  $\sqrt{s} = 13$  TeV in the single-lepton final state using the sum of masses of large-radius jets", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1608, 122 (2016)
- 35. "Measurement of the double-differential inclusive jet cross section in proton? proton collisions at  $\sqrt{s} = 13 \,\text{TeV}$ ", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 8, 451 (2016)
- 36. "Search for new physics in same-sign dilepton events in proton? proton collisions at  $\sqrt{s} = 13 \text{ TeV}$ ", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 8, 439 (2016)
- 37. "Measurement of  $\sin^2\theta_{\rm eff}^{\rm lept}$  using  $e^+e^-$  pairs from  $\gamma^*/Z$  bosons produced in  $p\bar{p}$  collisions at a center-of-momentum energy of 1.96 TeV", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 93, no. 11, 112016 (2016) FERMILAB-PUB-16-165-E
- 38. "Search for Higgs boson off-shell production in proton-proton collisions at 7 and 8 TeV and derivation of constraints on its total decay width", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1609, 051 (2016)
- 39. "Measurement of the integrated and differential  $t\bar{t}$  production cross sections for high- $p_t$  top quarks in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 94, no. 7, 072002 (2016)
- 40. "Search for narrow resonances in dijet final states at  $\sqrt(s) = 8$  TeV with the novel CMS technique of data scouting", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 117, no. 3, 031802 (2016)
- 41. "Search for lepton flavour violating decays of heavy resonances and quantum black holes to an e $\mu$  pair in proton-proton collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan et al. [CMS Collaboration]. Eur. Phys. J. C 76, no. 6, 317 (2016)
- 42. "Evidence for exclusive  $\gamma\gamma \to W^+W^-$  production and constraints on anomalous quartic gauge couplings in pp collisions at  $\sqrt{s}=7$  and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1608, 119 (2016)
- 43. "Search for dark matter particles in proton-proton collisions at  $\sqrt{s} = 8$  TeV using the razor variables", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1612, 088 (2016)
- 44. "Search for two Higgs bosons in final states containing two photons and two bottom quarks in proton-proton collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 94, no. 5, 052012 (2016)
- 45. "Measurement of the top quark mass using charged particles in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 9, 092006 (2016)
- 46. "Measurements of  $t\bar{t}$  charge asymmetry using dilepton final states in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 760, 365 (2016)
- 47. "Search for new physics with the  $M_{T2}$  variable in all-jets final states produced in pp collisions at  $\sqrt{s} = 13$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1610, 006 (2016)
- 48. "Search for neutral resonances decaying into a Z boson and a pair of b jets or tau leptons", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 759, 369 (2016)

- 49. " $\Upsilon(nS)$  polarizations versus particle multiplicity in pp collisions at  $\sqrt{s} = 7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 761, 31 (2016)
- 50. "Search for s channel single top quark production in pp collisions at  $\sqrt{s} = 7$  and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1609, 027 (2016)
- 51. "Measurement of the t-tbar production cross section in the e-mu channel in proton-proton collisions at sqrt(s) = 7 and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1608, 029 (2016)
- 52. "Search for heavy Majorana neutrinos in  $e^{\pm}e^{\pm}$  jets and  $e^{\pm}$   $\mu^{\pm}$  jets events in proton-proton collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1604, 169 (2016)
- 53. "Measurement of the differential cross section and charge asymmetry for inclusive pp  $\rightarrow$  W<sup>±</sup> + X production at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 8, 469 (2016)
- 54. "Search for direct pair production of supersymmetric top quarks decaying to all-hadronic final states in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 8, 460 (2016)
- 55. "Measurements of the tt production cross section in lepton+jets final states in pp collisions at 8 TeV and ratio of 8 to 7 TeV cross sections", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 77, no. 1, 15 (2017)
- 56. "Measurement of the forward?backward asymmetry of top-quark and antiquark pairs using the full CDF Run II data set", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 93, no. 11, 112005 (2016) FERMILAB-PUB-16-045-E
- 57. "Search for supersymmetry in electroweak production with photons and large missing transverse energy in pp collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 759, 479 (2016)
- 58. "Search for heavy resonances decaying to two Higgs bosons in final states containing four b quarks", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 7, 371 (2016)
- 59. "Measurement of the  $Z\gamma \to \nu\bar{\nu}\gamma$  production cross section in pp collisions at  $\sqrt{s}=8$  TeV and limits on anomalous  $ZZ\gamma$  and  $Z\gamma\gamma$  trilinear gauge boson couplings", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 760, 448 (2016)
- 60. "Search for supersymmetry in the multijet and missing transverse momentum final state in pp collisions at 13 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 758, 152 (2016)
- 61. "Measurement of dijet azimuthal decorrelation in pp collisions at  $\sqrt{s}=8\,\mathrm{TeV}$ ", V. Khachatryan et al. [CMS Collaboration]. Eur. Phys. J. C 76, no. 10, 536 (2016)
- 62. "Search for R-parity violating decays of a top squark in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 760, 178 (2016)
- 63. "Combined search for anomalous pseudoscalar HVV couplings in VH(H  $\rightarrow b\bar{b}$ ) production and H  $\rightarrow$  VV decay", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 759, 672 (2016)
- 64. "Search for direct pair production of scalar top quarks in the single- and dilepton channels in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1607, 027 (2016), Erratum: [JHEP 1609, 056 (2016)]
- 65. "Search for supersymmetry in pp collisions at sqrt(s) = 8 TeV in final states with boosted W bosons and b jets using razor variables", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 9, 092009 (2016)
- 66. "Azimuthal decorrelation of jets widely separated in rapidity in pp collisions at  $\sqrt{s} = 7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1608, 139 (2016)
- 67. "Measurement of the forward-backward asymmetry in low-mass bottom-quark pairs produced in proton-antiproton collisions", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 93, no. 11, 112003 (2016) FERMILAB-PUB-16-017-E

- 68. "Search for massive WH resonances decaying into the  $\ell\nu b\bar{b}$  final state at  $\sqrt{s}=8$  TeV", V. Khachatryan et al. [CMS Collaboration]. Eur. Phys. J. C 76, no. 5, 237 (2016)
- 69. "Forward–backward asymmetry of Drell-Yan lepton pairs in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 6, 325 (2016)
- 70. "Measurement of the  $B_c^{\pm}$  Production Cross Section in  $p\bar{p}$  Collisions at  $\sqrt{s}=1.96$  TeV", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 93, no. 5, 052001 (2016) FERMILAB-PUB-16-008-E-PPD
- 71. "Measurement of inclusive jet production and nuclear modifications in pPb collisions at  $\sqrt{s_{_{\mathrm{NN}}}} = 5.02$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 7, 372 (2016)
- 72. "Measurements of t t-bar spin correlations and top quark polarization using dilepton final states in pp collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 5, 052007 (2016)
- 73. "Search for a Low-Mass Neutral Higgs Boson with Suppressed Couplings to Fermions Using Events with Multiphoton Final States", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 93, no. 11, 112010 (2016) FERMILAB-PUB-15-578-E
- 74. "Correlations between jets and charged particles in PbPb and pp collisions at  $\sqrt{s_{\rm NN}} = 2.76$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1602, 156 (2016)
- 75. "Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at  $\sqrt{s} = 7$  and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1604, 005 (2016)
- 76. "Search for supersymmetry in events with soft leptons, low jet multiplicity, and missing transverse energy in proton–proton collisions at  $\sqrt{s}$ =8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 759, 9 (2016)
- 77. "Study of Z boson production in pPb collisions at  $\sqrt{sNN}$ =5.02TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 759, 36 (2016)
- 78. "Measurement of the inclusive jet cross section in pp collisions at  $\sqrt{s} = 2.76 \text{ TeV}$ ", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 5, 265 (2016)
- 79. "Search for narrow resonances decaying to dijets in proton-proton collisions at  $\sqrt(s) = 13$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 116, no. 7, 071801 (2016)
- 80. "Event generator tunes obtained from underlying event and multiparton scattering measurements", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 3, 155 (2016)
- 81. "Search for dark matter and unparticles produced in association with a Z boson in proton-proton collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 5, 052011 (2016)
- 82. "Measurement of spin correlations in  $t\bar{t}$  production using the matrix element method in the muon+jets final state in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 758, 321 (2016)
- 83. "Search for anomalous single top quark production in association with a photon in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1604, 035 (2016)
- 84. "Search for a low-mass pseudoscalar Higgs boson produced in association with a  $b\bar{b}$  pair in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 758, 296 (2016)
- 85. "Measurement of top quark polarisation in t-channel single top quark production", V. Khachatryan et al. [CMS Collaboration]. JHEP 1604, 073 (2016)
- 86. "Search for excited leptons in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan et al. [CMS Collaboration]. JHEP 1603, 125 (2016)
- 87. "Reconstruction and identification of  $\tau$  lepton decays to hadrons and  $\nu_{\tau}$  at CMS", V. Khachatryan *et al.* [CMS Collaboration]. JINST 11, no. 01. P01019 (2016)

- 88. "Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into  $\tau$  leptons in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1601, 079 (2016)
- 89. "Measurement of the top quark pair production cross section in proton-proton collisions at  $\sqrt(s) = 13$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 116, no. 5, 052002 (2016)
- 90. "Transverse momentum spectra of inclusive b jets in pPb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 754, 59 (2016)
- 91. "Measurement of  $t\bar{t}$  production with additional jet activity, including b quark jets, in the dilepton decay channel using pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 7, 379 (2016)
- 92. "Measurement of long-range near-side two-particle angular correlations in pp collisions at  $\sqrt{s} = 13$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 116, no. 17, 172302 (2016)
- 93. "Searches for a heavy scalar boson H decaying to a pair of 125 GeV Higgs bosons hh or for a heavy pseudoscalar boson A decaying to Zh, in the final states with  $h \to \tau \tau$ ", V. Khachatryan et al. [CMS Collaboration]. Phys. Lett. B 755, 217 (2016)
- 94. "Observation of top quark pairs produced in association with a vector boson in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1601, 096 (2016)
- 95. "Measurement of transverse momentum relative to dijet systems in PbPb and pp collisions at  $\sqrt{s_{\rm NN}} = 2.76$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1601, 006 (2016)
- 96. "Search for the associated production of a Higgs boson with a single top quark in proton-proton collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1606, 177 (2016)
- 97. "Search for the production of an excited bottom quark decaying to tW in proton-proton collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1601, 166 (2016)
- 98. "Measurement of the  $t\bar{t}$  production cross section in the all-jets final state in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 3, 128 (2016)
- 99. "Search for  $W' \to tb$  in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan et al. [CMS Collaboration]. JHEP 1602, 122 (2016)
- 100. "Search for vector-like charge 2/3 T quarks in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 1, 012003 (2016)
- 101. "Measurement of the top quark mass using proton-proton data at  $\sqrt{(s)} = 7$  and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 7, 072004 (2016)
- 102. "Measurement of the inelastic cross section in proton?lead collisions at  $\sqrt{s_{NN}} = 5.02$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 759, 641 (2016)
- 103. "Search for single production of scalar leptoquarks in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 3, 032005 (2016)
- 104. "Search for pair production of first and second generation leptoquarks in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 3, 032004 (2016)
- 105. "Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at  $\sqrt{s} = 8 \, \text{TeV}$ ", V. Khachatryan et al. [CMS Collaboration]. Eur. Phys. J. C 76, no. 1, 13 (2016)
- 106. "Measurement of vector boson plus  $D^*(2010)^+$  meson production in  $\bar{p}p$  collisions at  $\sqrt{s}=1.96\,\text{TeV}$ ", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 93, no. 5, 052012 (2016) FERMILAB-PUB-15-368
- 107. "Study of B Meson Production in p+Pb Collisions at  $\sqrt(s_{NN} = 5.02??$ TeV Using Exclusive Hadronic Decays", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 116, no. 3, 032301 (2016)

- 108. "Search for W' decaying to tau lepton and neutrino in proton-proton collisions at  $\sqrt(s) = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 755, 196 (2016)
- 109. "Measurement of the charge asymmetry in top quark pair production in pp collisions at  $\sqrt(s) = 8$  TeV using a template method", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 3, 034014 (2016)
- 110. "Search for neutral MSSM Higgs bosons decaying to  $\mu^+\mu^-$  in pp collisions at  $\sqrt{s} = 7$  and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 752, 221 (2016)
- 111. "Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 757, 6 (2016)
- 112. "Angular analysis of the decay  $B^0 \to K^{*0} \mu^+ \mu^-$  from pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 753, 424 (2016)
- 113. "Measurement of the CP-violating weak phase  $\phi_s$  and the decay width difference  $\Delta\Gamma_s$  using the  $B_s^0 \to J/\psi\phi(1020)$  decay channel in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 757, 97 (2016)
- 114. "Search for pair-produced vectorlike B quarks in proton-proton collisions at  $\sqrt{s}$ =8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 11, 112009 (2016)
- 115. "Measurement of the W<sup>+</sup>W<sup>-</sup> cross section in pp collisions at  $\sqrt{s} = 8$  TeV and limits on anomalous gauge couplings", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 7, 401 (2016)
- 116. "Inclusive and differential measurements of the  $t\bar{t}$  charge asymmetry in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 757, 154 (2016)
- 117. "Search for a Higgs boson decaying into  $\gamma^* \gamma \to \ell \ell \gamma$  with low dilepton mass in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 753, 341 (2016)
- 118. "Search for exotic decays of a Higgs boson into undetectable particles and one or more photons", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 753, 363 (2016)
- 119. "Search for resonant  $t\bar{t}$  production in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. D 93, no. 1, 012001 (2016)
- 120. "Search for a massive resonance decaying into a Higgs boson and a W or Z boson in hadronic final states in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1602, 145 (2016)
- 121. "A search for pair production of new light bosons decaying into muons", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 752, 146 (2016)
- 122. "Comparison of the  $Z/\gamma^2$  + jets to  $\gamma$  + jets cross sections in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1510, 128 (2015), Erratum: [JHEP 1604, 010 (2016)]
- 123. "Search for Third-Generation Scalar Leptoquarks in the  $t\tau$  Channel in Proton-Proton Collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1507, 042 (2015), Erratum: [JHEP 1611, 056 (2016)]
- 124. "Measurement of the ratio  $B(B_s^0 \to J/\psi f_0(980)) / B(B_s^0 \to J/\psi \phi(1020))$  in pp collisions at  $\sqrt{s} = 7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 756, 84 (2016)
- 125. "Search for new phenomena in monophoton final states in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 755, 102 (2016)
- 126. "Updated Measurement of the Single Top Quark Production Cross Section and Vtb in the Missing Transverse Energy Plus Jets Topology in  $p\bar{p}$  Collisions at  $\sqrt{s}=1.96$  TeV", T. A. Aaltonen et~al. [CDF Collaboration]. Phys. Rev. D 93, no. 3, 032011 (2016) FERMILAB-PUB-14-398-E
- 127. "Measurement of the  $pp \to ZZ$  production cross section and constraints on anomalous triple gauge couplings in four-lepton final states at  $\sqrt{s}$  =8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 740, 250 (2015), Corrigendum: [Phys. Lett. B 757, 569 (2016)]

- 128. "Measurement of the inclusive leptonic asymmetry in top-quark pairs that decay to two charged leptons at CDF", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 113, 042001 (2014), Erratum: [Phys. Rev. Lett. 117, no. 19, 199901 (2016)]
- 129. "Measurement of the leptonic asymmetry in  $t\bar{t}$  events produced in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 88, no. 7, 072003 (2013), Erratum: [Phys. Rev. D 94, no. 9, 099901 (2016)]
- 130. "Measurement of differential and integrated fiducial cross sections for Higgs boson production in the four-lepton decay channel in pp collisions at  $\sqrt{s} = 7$  and 8 TeV", V. Khachatryan et al. [CMS Collaboration]. JHEP 1604, 005 (2016)
- 131. "Search for supersymmetry in events with soft leptons, low jet multiplicity, and missing transverse energy in proton? proton collisions at  $\sqrt{s}$ =8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 759, 9 (2016)
- 132. "Study of Z boson production in pPb collisions at  $\sqrt{sNN}$ =5.02TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 759, 36 (2016)
- 133. "Measurement of the inclusive jet cross section in pp collisions at  $\sqrt{s} = 2.76$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 5, 265 (2016)
- 134. "Search for narrow resonances decaying to dijets in proton-proton collisions at  $\sqrt(s) = 13$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 116, no. 7, 071801 (2016)
- 135. "Event generator tunes obtained from underlying event and multiparton scattering measurements", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 3, 155 (2016)
- 136. "Search for dark matter and unparticles produced in association with a Z boson in proton-proton collisions at  $\sqrt{s}=8?$ ?TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 5, 052011 (2016)
- 137. "Measurement of spin correlations in  $t\bar{t}$  production using the matrix element method in the muon+jets final state in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 758, 321 (2016)
- 138. "Search for anomalous single top quark production in association with a photon in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1604, 035 (2016)
- 139. "Search for a low-mass pseudoscalar Higgs boson produced in association with a  $b\bar{b}$  pair in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 758, 296 (2016)
- 140. "Measurement of top quark polarisation in t-channel single top quark production", V. Khachatryan et al. [CMS Collaboration]. JHEP 1604, 073 (2016)
- 141. "Search for excited leptons in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan et al. [CMS Collaboration]. JHEP 1603, 125 (2016)
- 142. "Reconstruction and identification of? lepton decays to hadrons and?? at CMS", V. Khachatryan et al. [CMS Collaboration]. JINST 11, no. 01, P01019 (2016)
- 143. "Search for a very light NMSSM Higgs boson produced in decays of the 125 GeV scalar boson and decaying into  $\tau$  leptons in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1601, 079 (2016)
- 144. "Measurement of the top quark pair production cross section in proton-proton collisions at  $\sqrt(s)=13$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 116, no. 5, 052002 (2016)
- 145. "Search for a light charged Higgs boson decaying to  $c\bar{s}$  in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1512, 178 (2015)
- 146. "Transverse momentum spectra of inclusive b jets in pPb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 754, 59 (2016)

- 147. "Measurement of  $t\bar{t}$  production with additional jet activity, including b quark jets, in the dilepton decay channel using pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 7, 379 (2016)
- 148. "Measurement of long-range near-side two-particle angular correlations in pp collisions at  $\sqrt{s}$  =13 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 116, no. 17, 172302 (2016)
- 149. "Searches for a heavy scalar boson H decaying to a pair of 125 GeV Higgs bosons hh or for a heavy pseudoscalar boson A decaying to Zh, in the final states with  $h \to \tau \tau$ ", V. Khachatryan et al. [CMS Collaboration]. Phys. Lett. B 755, 217 (2016)
- 150. "Observation of top quark pairs produced in association with a vector boson in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1601, 096 (2016)
- 151. "Measurement of transverse momentum relative to dijet systems in PbPb and pp collisions at  $\sqrt{s_{\rm NN}} = 2.76$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1601, 006 (2016)
- 152. "Search for the associated production of a Higgs boson with a single top quark in protonproton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1606, 177 (2016)
- 153. "Search for the production of an excited bottom quark decaying to tW in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1601, 166 (2016)
- 154. "Measurement of the  $t\bar{t}$  production cross section in the all-jets final state in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 3, 128 (2016)
- 155. "Search for  $W' \to tb$  in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan et al. [CMS Collaboration]. JHEP 1602, 122 (2016)
- 156. "Search for vector-like charge 2/3 T quarks in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 1, 012003 (2016)
- 157. "Measurement of the top quark mass using proton-proton data at  $\sqrt{(s)} = 7$  and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 7, 072004 (2016)
- 158. "Measurement of the inelastic cross section in proton?lead collisions at  $\sqrt{s_{NN}} = 5.02$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 759, 641 (2016)
- 159. "Search for single production of scalar leptoquarks in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 3, 032005 (2016)
- 160. "Search for pair production of first and second generation leptoquarks in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 3, 032004 (2016)
- 161. "Measurement of differential cross sections for Higgs boson production in the diphoton decay channel in pp collisions at  $\sqrt{s} = 8 \text{ TeV}$ ", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 1, 13 (2016)
- 162. "Search for a charged Higgs boson in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan et al. [CMS Collaboration]. JHEP 1511, 018 (2015)
- 163. "Search for supersymmetry in the vector-boson fusion topology in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1511, 189 (2015)
- 164. "Measurement of vector boson plus  $D^*(2010)^+$  meson production in  $\bar{p}p$  collisions at  $\sqrt{s}=1.96\,\text{TeV}$ ", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 93, no. 5, 052012 (2016) FERMILAB-PUB-15-368
- 165. "Study of B Meson Production in p+Pb Collisions at  $\sqrt(s_{NN} = 5.02?$ ?TeV Using Exclusive Hadronic Decays", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 116, no. 3, 032301 (2016)
- 166. "Study of the energy dependence of the underlying event in proton-antiproton collisions", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 92, no. 9, 092009 (2015) FERMILAB-PUB-15-361-E

- 167. "Search for W' decaying to tau lepton and neutrino in proton-proton collisions at  $\sqrt(s) = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 755, 196 (2016)
- 168. "Measurement of the charge asymmetry in top quark pair production in pp collisions at  $\sqrt(s) = 8$  TeV using a template method", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 3, 034014 (2016)
- 169. "Search for neutral MSSM Higgs bosons decaying to  $\mu^+\mu^-$  in pp collisions at  $\sqrt{s} = 7$  and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 752, 221 (2016)
- 170. "Search for supersymmetry in events with a photon, a lepton, and missing transverse momentum in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 757, 6 (2016)
- 171. "Angular analysis of the decay  $B^0 \to K^{*0} \mu^+ \mu^-$  from pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 753, 424 (2016)
- 172. "Measurement of the CP-violating weak phase  $\phi_s$  and the decay width difference  $\Delta\Gamma_s$  using the  $B_s^0 \to J/\psi \phi(1020)$  decay channel in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 757, 97 (2016)
- 173. "Measurement of the underlying event activity using charged-particle jets in proton-proton collisions at sqrt(s) = 2.76 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1509, 137 (2015)
- 174. "Search for pair-produced vectorlike B quarks in proton-proton collisions at  $\sqrt{s}$ =8??TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 93, no. 11, 112009 (2016)
- 175. "Limits on the Higgs boson lifetime and width from its decay to four charged leptons", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 92, no. 7, 072010 (2015)
- 176. "Pseudorapidity distribution of charged hadrons in proton-proton collisions at  $\sqrt{s} = 13$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 751, 143 (2015)
- 177. "Measurement of the W<sup>+</sup>W<sup>-</sup> cross section in pp collisions at  $\sqrt{s} = 8$  TeV and limits on anomalous gauge couplings", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 76, no. 7, 401 (2016)
- 178. "Inclusive and differential measurements of the  $t\bar{t}$  charge asymmetry in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 757, 154 (2016)
- 179. "Search for a Higgs boson decaying into  $\gamma^* \gamma \to \ell \ell \gamma$  with low dilepton mass in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 753, 341 (2016)
- 180. "Search for supersymmetry with photons in pp collisions at  $\sqrt{s}$ =8??TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. D 92, no. 7, 072006 (2015)
- 181. "Search for exotic decays of a Higgs boson into undetectable particles and one or more photons", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 753, 363 (2016)
- 182. "Production of leading charged particles and leading charged-particle jets at small transverse momenta in pp collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 92, no. 11, 112001 (2015)
- 183. "Search for neutral MSSM Higgs bosons decaying into a pair of bottom quarks", V. Khachatryan et al. [CMS Collaboration]. JHEP 1511, 071 (2015)
- 184. "Search for resonant  $t\bar{t}$  production in proton-proton collisions at  $\sqrt{s}=8?$ ?TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. D 93, no. 1, 012001 (2016)
- 185. "Search for diphoton resonances in the mass range from 150 to 850 GeV in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 750, 494 (2015)
- 186. "Search for a massive resonance decaying into a Higgs boson and a W or Z boson in hadronic final states in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1602, 145 (2016)
- 187. "Search for the standard model Higgs boson produced through vector boson fusion and decaying to  $b\bar{b}$ ", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 92, no. 3, 032008 (2015)

- 188. "A search for pair production of new light bosons decaying into muons", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 752, 146 (2016)
- 189. "Search for neutral color-octet weak-triplet scalar particles in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1509, 201 (2015)
- 190. "Comparison of the  $Z/\gamma^2$  + jets to  $\gamma$  + jets cross sections in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1510, 128 (2015), Erratum: [JHEP 1604, 010 (2016)]
- 191. "Measurement of the differential cross section for top quark pair production in pp collisions at  $\sqrt{s} = 8 \,\text{TeV}$ ", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 11, 542 (2015)
- 192. "Measurement of the Production and Differential Cross Sections of  $W^+W^-$  Bosons in Association with Jets in  $p\bar{p}$  Collisions at  $\sqrt{s}=1.96$  TeV", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 91, no. 11, 111101 (2015), Addendum: [Phys. Rev. D 92, no. 3, 039901 (2015)] FERMILAB-PUB-15-191-PPD
- 193. "Measurement of the top-quark mass in the  $t\bar{t}$  dilepton channel using the full CDF Run II data set", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 92, no. 3, 032003 (2015) FERMILAB-PUB-15-190-E
- 194. "First measurement of the forward-backward asymmetry in bottom-quark pair production at high mass", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 92, no. 3, 032006 (2015) FERMILAB-PUB-15-153-E
- 195. "Search for a pseudoscalar boson decaying into a Z boson and the 125 GeV Higgs boson in  $?^+?^?b\bar{b}$  final states", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 748, 221 (2015)
- 196. "Angular coefficients of Z bosons produced in pp collisions at  $\sqrt{s} = 8$  TeV and decaying to  $\mu^+\mu^-$  as a function of transverse momentum and rapidity", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 750, 154 (2015)
- 197. "Measurement of the Z boson differential cross section in transverse momentum and rapidity in proton?proton collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 749, 187 (2015)
- 198. "Search for the production of dark matter in association with top-quark pairs in the single-lepton final state in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan et al. [CMS Collaboration]. JHEP 1506, 121 (2015)
- 199. "Search for Resonances Decaying to Top and Bottom Quarks with the CDF Experiment", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 115, no. 6, 061801 (2015) FERMILAB-PUB-15-123-PPD
- 200. "Search for a Higgs boson in the mass range from 145 to 1000 GeV decaying to a pair of W or Z bosons", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1510, 144 (2015)
- 201. "Search for Third-Generation Scalar Leptoquarks in the  $t\tau$  Channel in Proton-Proton Collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1507, 042 (2015), Erratum: [JHEP 1611, 056 (2016)]
- 202. "Measurement of diffraction dissociation cross sections in pp collisions at  $\sqrt{s} = 7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 92, no. 1, 012003 (2015)
- 203. "Searches for third-generation squark production in fully hadronic final states in protonproton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1506, 116 (2015)
- 204. "Combined Measurement of the Higgs Boson Mass in pp Collisions at  $\sqrt{s}=7$  and 8 TeV with the ATLAS and CMS Experiments", G. Aad et~al. [ATLAS and CMS Collaborations]. Phys. Rev. Lett. 114, 191803 (2015) ATLAS-HIGG-2014-14, CMS-HIG-14-042, CERN-PH-EP-2015-075
- 205. "Study of W boson production in pPb collisions at  $\sqrt{s_{\rm NN}} = 5.02$  TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Lett. B 750, 565 (2015)

- 206. "Measurements of the Z Z production cross sections in the  $2l2\nu$  channel in proton?proton collisions at  $\sqrt{s} = 7$  and 8 TeV and combined constraints on triple gauge couplings", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 10, 511 (2015)
- 207. "Tevatron Combination of Single-Top-Quark Cross Sections and Determination of the Magnitude of the Cabibbo-Kobayashi-Maskawa Matrix Element V<sub>tb</sub>", T. A. Aaltonen *et al.* [CDF and D0 Collaborations]. Phys. Rev. Lett. 115, no. 15, 152003 (2015) FERMILAB-PUB-15-088-E
- 208. "Search for resonant pair production of Higgs bosons decaying to two bottom quark?antiquark pairs in proton?proton collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 749, 560 (2015)
- 209. "Search for vector-like T quarks decaying to top quarks and Higgs bosons in the all-hadronic channel using jet substructure", V. Khachatryan et al. [CMS Collaboration]. JHEP 1506, 080 (2015)
- 210. "Evidence for transverse momentum and pseudorapidity dependent event plane fluctuations in PbPb and pPb collisions", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. C 92, no. 3, 034911 (2015)
- 211. "Study of Final-State Radiation in Decays of Z Bosons Produced in pp Collisions at 7 TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. D 91, no. 9, 092012 (2015)
- 212. "Search for Lepton-Flavour-Violating Decays of the Higgs Boson", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 749, 337 (2015)
- 213. "Search for Physics Beyond the Standard Model in Events with Two Leptons, Jets, and Missing Transverse Momentum in pp Collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1504, 124 (2015)
- 214. "Measurement of the Z? Production Cross Section in pp Collisions at 8 TeV and Search for Anomalous Triple Gauge Boson Couplings", V. Khachatryan et al. [CMS Collaboration]. JHEP 1504, 164 (2015)
- 215. "Nuclear Effects on the Transverse Momentum Spectra of Charged Particles in pPb Collisions at  $\sqrt{s_{\text{NN}}} = 5.02$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 5, 237 (2015)
- 216. "Evidence for Collective Multiparticle Correlations in p-Pb Collisions", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. Lett. 115, no. 1, 012301 (2015)
- 217. "Search for Narrow High-Mass Resonances in Proton? Proton Collisions at  $\sqrt{s}=8$  TeV Decaying to a Z and a Higgs Boson", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 748, 255 (2015)
- 218. "Distributions of Topological Observables in Inclusive Three- and Four-Jet Events in pp Collisions at sqrt(s) = 7 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 7, 302 (2015)
- 219. "Searches for Supersymmetry using the  $M_{T2}$  Variable in Hadronic Events Produced in pp Collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1505, 078 (2015)
- 220. "Measurement of J/? and ?(2S) Prompt Double-Differential Cross Sections in pp Collisions at  $\sqrt{s}$ =7??TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 114, no. 19, 191802 (2015)
- 221. "Performance of Photon Reconstruction and Identification with the CMS Detector in Proton-Proton Collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JINST 10, no. 08, P08010 (2015)
- 222. "Performance of Electron Reconstruction and Selection with the CMS Detector in Proton-Proton Collisions at s=8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JINST 10, no. 06, P06005 (2015)
- 223. "Constraints on the pMSSM, AMSB model and on other models from the search for long-lived charged particles in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan et al. [CMS Collaboration]. Eur. Phys. J. C 75, no. 7, 325 (2015)

- 224. "Search for a Standard Model Higgs Boson Produced in Association with a Top-Quark Pair and Decaying to Bottom Quarks Using a Matrix Element Method", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 6, 251 (2015)
- 225. "Measurement of central exclusive  $\pi^+\pi^-$  production in  $p\bar{p}$  collisions at  $\sqrt{s}=0.9$  and 1.96 TeV at CDF", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 91, no. 9, 091101 (2015) FERMILAB-PUB-15-033-PPD
- 226. "Tevatron Constraints on Models of the Higgs Boson with Exotic Spin and Parity Using Decays to Bottom-Antibottom Quark Pairs", T. Aaltonen et al. [CDF and D0 Collaborations]. Phys. Rev. Lett. 114, no. 15, 151802 (2015) FERMILAB-PUB-15-029-E
- 227. "Search for Supersymmetry Using Razor Variables in Events with b-Tagged Jets in pp Collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. D 91, 052018 (2015)
- 228. "Measurements of the  $\Upsilon(1S)$ ,  $\Upsilon(2S)$ , and  $\Upsilon(3S)$  differential cross sections in pp collisions at  $\sqrt{s} = 7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 749, 14 (2015)
- 229. "Measurement of the ratio  $B(B_s^0 \to J/\psi f_0(980)) / B(B_s^0 \to J/\psi \phi(1020))$  in pp collisions at  $\sqrt{s} = 7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 756, 84 (2016)
- 230. "Search for Decays of Stopped Long-Lived Particles Produced in Proton? Proton Collisions at  $\sqrt{s} = 8 \,\text{TeV}$ ", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 4, 151 (2015)
- 231. "Search for heavy Majorana neutrinos in  $\mu^{\pm}\mu^{\pm}$ + jets events in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 748, 144 (2015)
- 232. "Constraints on Models of the Higgs Boson with Exotic Spin and Parity using Decays to Bottom-Antibottom Quarks in the Full CDF Data Set", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 114, no. 14, 141802 (2015) FERMILAB-PUB-15-012-E
- 233. "Search for resonances and quantum black holes using dijet mass spectra in proton-proton collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 91, no. 5, 052009 (2015)
- 234. "Precise determination of the mass of the Higgs boson and tests of compatibility of its couplings with the standard model predictions using proton collisions at 7 and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 5, 212 (2015)
- 235. "Search for pair-produced resonances decaying to jet pairs in proton? proton collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 747, 98 (2015)
- 236. "Search for physics beyond the standard model in dilepton mass spectra in proton-proton collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1504, 025 (2015)
- 237. "Search for production of an  $\Upsilon(1S)$  meson in association with a W or Z boson using the full 1.96 TeV  $p\bar{p}$  collision data set at CDF", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 91, no. 5, 052011 (2015) FERMILAB-PUB-14-540-PPD
- 238. "Searches for supersymmetry based on events with b jets and four W bosons in pp collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 745, 5 (2015)
- 239. "Measurement of the inclusive 3-jet production differential cross section in proton?proton collisions at 7 TeV and determination of the strong coupling constant in the TeV range", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 5, 186 (2015)
- 240. "Measurements of differential and double-differential Drell-Yan cross sections in protonproton collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 4, 147 (2015)
- 241. "Search for stealth supersymmetry in events with jets, either photons or leptons, and low missing transverse momentum in pp collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 743, 503 (2015)
- 242. "Search for long-lived particles that decay into final states containing two electrons or two muons in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 91, no. 5, 052012 (2015)

- 243. "Search for Long-Lived Neutral Particles Decaying to Quark-Antiquark Pairs in Proton-Proton Collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 91, no. 1, 012007 (2015)
- 244. "Search for disappearing tracks in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan et al. [CMS Collaboration]. JHEP 1501, 096 (2015)
- 245. "Measurement of the cross section ratio  $\sigma_{t\bar{t}b\bar{b}}/\sigma_{t\bar{t}jj}$  in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Lett. B 746, 132 (2015)
- 246. "Observation of the rare  $B_s^0 \to \mu^+\mu^-$  decay from the combined analysis of CMS and LHCb data", V. Khachatryan *et al.* [CMS and LHCb Collaborations]. Nature 522, 68 (2015) CERN-PH-EP-2014-220, CMS-BPH-13-007, LHCB-PAPER-2014-049
- 247. "Constraints on the spin-parity and anomalous HVV couplings of the Higgs boson in proton collisions at 7 and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 92, no. 1, 012004 (2015)
- 248. "Search for quark contact interactions and extra spatial dimensions using dijet angular distributions in proton? proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 746, 79 (2015)
- 249. "Performance of the CMS missing transverse momentum reconstruction in pp data at  $\sqrt{s}$  = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JINST 10, no. 02, P02006 (2015)
- 250. "Constraints on parton distribution functions and extraction of the strong coupling constant from the inclusive jet cross section in pp collisions at  $\sqrt{s} = 7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 6, 288 (2015)
- 251. "Search for a standard model-like Higgs boson in the ? $^+$ ?" and  $e^+e^?$  decay channels at the LHC", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 744, 184 (2015)
- 252. "Study of vector boson scattering and search for new physics in events with two same-sign leptons and two jets", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 114, no. 5, 051801 (2015)
- 253. "Measurement of the ratio of the production cross sections times branching fractions of  $B_c^{\pm} \to J/\psi \pi^{\pm}$  and  $B^{\pm} \to J/\psi K^{\pm}$  and  $\mathcal{B}(B_c^{\pm} \to J/\psi \pi^{\pm} \pi^{\mp})/\mathcal{B}(B_c^{\pm} \to J/\psi \pi^{\pm})$  in pp collisions at  $\sqrt{s} = 7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1501, 063 (2015)
- 254. "Study of Z production in PbPb and pp collisions at  $\sqrt{s_{\rm NN}} = 2.76$  TeV in the dimuon and dielectron decay channels", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1503, 022 (2015)
- 255. "Measurement of electroweak production of two jets in association with a Z boson in proton-proton collisions at  $\sqrt{s}=8\,\text{TeV}$ ", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 2, 66 (2015)
- 256. "Measurement of the W boson helicity in events with a single reconstructed top quark in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1501, 053 (2015)
- 257. "Search for Monotop Signatures in Proton-Proton Collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. Lett. 114, no. 10, 101801 (2015)
- 258. "Measurement of the production cross section ratio  $\sigma(Xb2(1P)) / \sigma(Xb1(1P))$  in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 743, 383 (2015)
- 259. "Search for Displaced Supersymmetry in events with an electron and a muon with large impact parameters", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 114, no. 6, 061801 (2015)
- 260. "Measurement of differential production cross section for  $Z/\gamma^*$  bosons in association with jets in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 91, no. 1, 012002 (2015) FERMILAB-PUB-14-337-E
- 261. "Long-range two-particle correlations of strange hadrons with charged particles in pPb and PbPb collisions at LHC energies", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 742, 200 (2015)

- 262. "Search for dark matter, extra dimensions, and unparticles in monojet events in proton? proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 5, 235 (2015)
- 263. "Measurements of jet multiplicity and differential production cross sections of Z+ jets events in proton-proton collisions at  $\sqrt{s}=7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 91, no. 5, 052008 (2015)
- 264. "Search for physics beyond the standard model in final states with a lepton and missing transverse energy in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 91, no. 9, 092005 (2015)
- 265. "Studies of high-transverse momentum jet substructure and top quarks produced in 1.96 TeV proton-antiproton collisions", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 91, no. 3, 032006 (2015) FERMILAB-PUB-14-228-E
- 266. "Search for new resonances decaying via WZ to leptons in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 740, 83 (2015)
- 267. "Differential cross section measurements for the production of a W boson in association with jets in proton? proton collisions at  $\sqrt{s} = 7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 741, 12 (2015)
- 268. "Measurement of the  $pp \to ZZ$  production cross section and constraints on anomalous triple gauge couplings in four-lepton final states at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 740, 250 (2015), Corrigendum: [Phys. Lett. B 757, 569 (2016)]
- 269. "Measurement of jet multiplicity distributions in  $t\bar{t}$  production in pp collisions at  $\sqrt{s} = 7 \text{ TeV}$ ", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 74, 3014 (2015), Erratum: [Eur. Phys. J. C 75, no. 5, 216 (2015)]
- 270. "Evidence of b-Jet Quenching in PbPb Collisions at  $\sqrt{s_{NN}} = 2.76?$ ?TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 113, no. 13, 132301 (2014), Erratum: [Phys. Rev. Lett. 115, no. 2, 029903 (2015)]
- 271. "Search for new physics in events with same-sign dileptons and jets in pp collisions at  $\sqrt{s}$  = 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1401, 163 (2014), Erratum: [JHEP 1501, 014 (2015)] CERN-PH-EP-2013-213
- 272. "Precise determination of the mass of the Higgs boson and tests of compatibility of its couplings with the standard model predictions using proton collisions at 7 and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 5, 212 (2015)
- 273. "Search for pair-produced resonances decaying to jet pairs in proton? proton collisions at  $\sqrt{s}$ =8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 747, 98 (2015)
- 274. "Search for physics beyond the standard model in dilepton mass spectra in proton-proton collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1504, 025 (2015)
- 275. "Search for production of an  $\Upsilon(1S)$  meson in association with a W or Z boson using the full 1.96 TeV  $p\bar{p}$  collision data set at CDF", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 91, no. 5, 052011 (2015)
- 276. "Searches for supersymmetry based on events with b jets and four W bosons in pp collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 745, 5 (2015)
- 277. "Measurement of the inclusive 3-jet production differential cross section in proton?proton collisions at 7 TeV and determination of the strong coupling constant in the TeV range", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 5, 186 (2015)
- 278. "Measurements of differential and double-differential Drell-Yan cross sections in protonproton collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 4, 147 (2015)
- 279. "Search for stealth supersymmetry in events with jets, either photons or leptons, and low missing transverse momentum in pp collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 743, 503 (2015)

- 280. "Search for long-lived particles that decay into final states containing two electrons or two muons in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 91, no. 5, 052012 (2015)
- 281. "Search for Long-Lived Neutral Particles Decaying to Quark-Antiquark Pairs in Proton-Proton Collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 91, no. 1, 012007 (2015)
- 282. "Search for disappearing tracks in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan et al. [CMS Collaboration]. JHEP 1501, 096 (2015)
- 283. "Measurement of the cross section ratio  $\sigma_{t\bar{t}b\bar{b}}/\sigma_{t\bar{t}jj}$  in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Lett. B 746, 132 (2015)
- 284. "Observation of the rare  $B_s^0 \to \mu^+\mu^-$  decay from the combined analysis of CMS and LHCb data", V. Khachatryan *et al.* [CMS and LHCb Collaborations]. Nature 522, 68 (2015)
- 285. "Constraints on the spin-parity and anomalous HVV couplings of the Higgs boson in proton collisions at 7 and 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 92, no. 1, 012004 (2015)
- 286. "Search for quark contact interactions and extra spatial dimensions using dijet angular distributions in proton? proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 746, 79 (2015)
- 287. "Performance of the CMS missing transverse momentum reconstruction in pp data at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JINST 10, no. 02, P02006 (2015)
- 288. "Search for new phenomena in monophoton final states in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 755, 102 (2016)
- 289. "Constraints on parton distribution functions and extraction of the strong coupling constant from the inclusive jet cross section in pp collisions at  $\sqrt{s} = 7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 6, 288 (2015)
- 290. "Search for a standard model-like Higgs boson in the ? $^+$ ?" and  $e^+e^?$  decay channels at the LHC", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 744, 184 (2015)
- 291. "Study of vector boson scattering and search for new physics in events with two same-sign leptons and two jets", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 114, no. 5, 051801 (2015)
- 292. "Measurement of the ratio of the production cross sections times branching fractions of  $B_c^{\pm} \to J/\psi \pi^{\pm}$  and  $B^{\pm} \to J/\psi K^{\pm}$  and  $\mathcal{B}(B_c^{\pm} \to J/\psi \pi^{\pm} \pi^{\mp})/\mathcal{B}(B_c^{\pm} \to J/\psi \pi^{\pm})$  in pp collisions at  $\sqrt{s} = 7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1501, 063 (2015)
- 293. "Measurement of indirect CP-violating asymmetries in  $D^0 \to K^+K^-$  and  $D^0 \to \pi^+\pi^-$  decays at CDF", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 90, no. 11, 111103 (2014)
- 294. "Updated Measurement of the Single Top Quark Production Cross Section and Vtb in the Missing Transverse Energy Plus Jets Topology in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 93, no. 3, 032011 (2016)
- 295. "Study of Z production in PbPb and pp collisions at  $\sqrt{s_{\rm NN}}=2.76$  TeV in the dimuon and dielectron decay channels", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1503, 022 (2015)
- 296. "Identification techniques for highly boosted W bosons that decay into hadrons", V. Khachatryan et al. [CMS Collaboration]. JHEP 1412, 017 (2014)
- 297. "Measurement of electroweak production of two jets in association with a Z boson in proton-proton collisions at  $\sqrt{s}=8\,\text{TeV}$ ", V. Khachatryan et al. [CMS Collaboration]. Eur. Phys. J. C 75, no. 2, 66 (2015)
- 298. "Searches for heavy Higgs bosons in two-Higgs-doublet models and for t?ch decay using multilepton and diphoton final states in pp collisions at 8 TeV", V. Khachatryan  $et\ al.$  [CMS Collaboration]. Phys. Rev. D 90, 112013 (2014)

- 299. "Measurement of Prompt  $\psi(2S) \to J/\psi$  Yield Ratios in Pb-Pb and p-p Collisions at  $\sqrt{s_{NN}}=2.76?$ ?TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 113, no. 26, 262301 (2014)
- 300. "Measurement of the W boson helicity in events with a single reconstructed top quark in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1501, 053 (2015)
- 301. "Search for Monotop Signatures in Proton-Proton Collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan et al. [CMS Collaboration]. Phys. Rev. Lett. 114, no. 10, 101801 (2015)
- 302. "Search for Standard Model Production of Four Top Quarks in the Lepton + Jets Channel in pp Collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1411, 154 (2014)
- 303. "Measurement of the production cross section ratio sigma(chi[b2](1P)) / sigma(chi[b1](1P)) in pp collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 743, 383 (2015)
- 304. "Measurement of the Top-Quark Mass in the All-Hadronic Channel using the full CDF data set", T. A. Aaltonen et al. [CDF Collaboration]. Phys. Rev. D 90, no. 9, 091101 (2014)
- 305. "Search for Displaced Supersymmetry in events with an electron and a muon with large impact parameters", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 114, no. 6, 061801 (2015)
- 306. "Measurement of differential production cross section for  $Z/\gamma^*$  bosons in association with jets in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 91, no. 1, 012002 (2015)
- 307. "Long-range two-particle correlations of strange hadrons with charged particles in pPb and PbPb collisions at LHC energies", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 742, 200 (2015)
- 308. "Searches for electroweak neutralino and chargino production in channels with Higgs, Z, and W bosons in pp collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 90, no. 9, 092007 (2014)
- 309. "Search for dark matter, extra dimensions, and unparticles in monojet events in proton? proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 75, no. 5, 235 (2015)
- 310. "Search for neutral MSSM Higgs bosons decaying to a pair of tau leptons in pp collisions", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1410, 160 (2014)
- 311. "Measurements of jet multiplicity and differential production cross sections of Z+ jets events in proton-proton collisions at  $\sqrt{s}=7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 91, no. 5, 052008 (2015)
- 312. "Search for physics beyond the standard model in final states with a lepton and missing transverse energy in proton-proton collisions at sqrt(s) = 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 91, no. 9, 092005 (2015)
- 313. "Search for the associated production of the Higgs boson with a top-quark pair", V. Khachatryan et al. [CMS Collaboration]. JHEP 1409, 087 (2014), [JHEP 1410, 106 (2014)]
- 314. "Search for pair production of third-generation scalar leptoquarks and top squarks in proton? proton collisions at  $\sqrt{s}$ =8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 739, 229 (2014)
- 315. "Measurement of the  $t\bar{t}$  production cross section in pp collisions at  $\sqrt{s}=8$  TeV in dilepton final states containing one  $\tau$  lepton", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 739, 23 (2014)
- 316. "Measurement of the Single Top Quark Production Cross Section and  $|V_{tb}|$  in Events with One Charged Lepton, Large Missing Transverse Energy, and Jets at CDF", T. A. Aaltonen et al. [CDF Collaboration]. Phys. Rev. Lett. 113, no. 26, 261804 (2014)

- 317. "Search for heavy neutrinos and W bosons with right-handed couplings in proton-proton collisions at  $\sqrt{s} = 8 \,\text{TeV}$ ", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 74, no. 11, 3149 (2014)
- 318. "Studies of high-transverse momentum jet substructure and top quarks produced in 1.96 TeV proton-antiproton collisions", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 91, no. 3, 032006 (2015)
- 319. "Search for new resonances decaying via WZ to leptons in proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 740, 83 (2015)
- 320. "Study of hadronic event-shape variables in multijet final states in pp collisions at sqrt(s) = 7 TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1410, 87 (2014)
- 321. "Observation of the diphoton decay of the Higgs boson and measurement of its properties", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 74, no. 10, 3076 (2014)
- 322. "Measurement of top quark-antiquark pair production in association with a W or Z boson in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 74, no. 9, 3060 (2014)
- 323. "Differential cross section measurements for the production of a W boson in association with jets in proton? proton collisions at  $\sqrt{s} = 7$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 741, 12 (2015)
- 324. "Search for excited quarks in the  $\gamma$ +jet final state in proton? proton collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 738, 274 (2014)
- 325. "Measurement of jet fragmentation in PbPb and pp collisions at  $\sqrt{s_{NN}} = 2.76$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. C 90, no. 2, 024908 (2014)
- 326. "Measurement of prompt  $J/\psi$  pair production in pp collisions at  $\sqrt{s}=7$  Tev", V. Khachatryan et al. [CMS Collaboration]. JHEP 1409, 094 (2014)
- 327. "Measurement of the ratio of inclusive jet cross sections using the anti- $k_T$  algorithm with radius parameters R=0.5 and 0.7 in pp collisions at  $\sqrt{s} = 7??$ TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 90, no. 7, 072006 (2014)
- 328. "Measurement of the  $pp \to ZZ$  production cross section and constraints on anomalous triple gauge couplings in four-lepton final states at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 740, 250 (2015)
- 329. "Search for jet extinction in the inclusive jet- $p_t$  spectrum from proton-proton collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Rev. D 90, no. 3, 032005 (2014)
- 330. "Searches for electroweak production of charginos, neutralinos, and sleptons decaying to leptons and W, Z, and Higgs bosons in pp collisions at 8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C 74, no. 9, 3036 (2014)
- 331. "Measurement of differential cross sections for the production of a pair of isolated photons in pp collisions at  $\sqrt{s} = 7 \,\text{TeV}$ ", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 74, no. 11, 3129 (2014)
- 332. "Description and performance of track and primary-vertex reconstruction with the CMS tracker", S. Chatrchyan *et al.* [CMS Collaboration]. JINST 9, no. 10, P10009 (2014)
- 333. "Search for supersymmetry with razor variables in pp collisions at  $\sqrt{s}$ =7??TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 90, no. 11, 112001 (2014)
- 334. "Search for top-squark pairs decaying into Higgs or Z bosons in pp collisions at  $\sqrt{s}$ =8 TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 736, 371 (2014)
- 335. "Constraints on the Higgs boson width from off-shell production and decay to Z-boson pairs", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 736, 64 (2014)
- 336. "Search for massive resonances decaying into pairs of boosted bosons in semi-leptonic final states at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1408, 174 (2014)
- 337. "Search for massive resonances in dijet systems containing jets tagged as W or Z boson decays in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. JHEP 1408, 173 (2014)

Nobert Han

- 338. "Measurement of pseudorapidity distributions of charged particles in proton-proton collisions at  $\sqrt{s} = 8$  TeV by the CMS and TOTEM experiments", S. Chatrchyan *et al.* [CMS and TOTEM Collaborations]. Eur. Phys. J. C 74, no. 10, 3053 (2014)
- 339. "Search for anomalous production of events with three or more leptons in pp collisions at  $\sqrt{s} = 8$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 90, 032006 (2014)
- 340. "Search for  $WW\gamma$  and  $WZ\gamma$  production and constraints on anomalous quartic gauge couplings in pp collisions at  $\sqrt{s}=8$  TeV", S. Chatrchyan et~al. [CMS Collaboration]. Phys. Rev. D 90, no. 3, 032008 (2014)
- 341. "Measurement of the inclusive leptonic asymmetry in top-quark pairs that decay to two charged leptons at CDF", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 113, 042001 (2014)
- 342. "Measurement of  $B(t \to Wb)/B(t \to Wq)$  in Top-Quark-Pair Decays Using Dilepton Events and the Full CDF Run II Data Set", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 112, no. 22, 221801 (2014)
- 343. "Measurement of jet multiplicity distributions in  $t\bar{t}$  production in pp collisions at  $\sqrt{s} = 7 \text{ TeV}$ ", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 74, 3014 (2015), [Eur. Phys. J. C 75, no. 5, 216 (2015)]
- 344. "Measurement of the ratio  $\mathcal{B}(t \to Wb)/\mathcal{B}(t \to Wq)$  in pp collisions at  $\sqrt{s} = 8$  TeV", V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B 736, 33 (2014)
- 345. "Search for invisible decays of Higgs bosons in the vector boson fusion and associated ZH production modes", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 74, 2980 (2014)
- 346. "Mass and lifetime measurements of bottom and charm baryons in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 89, no. 7, 072014 (2014)
- 347. "Measurement of the t-channel single-top-quark production cross section and of the  $\mid V_{tb} \mid$  CKM matrix element in pp collisions at  $\sqrt{s}=8$  TeV", V. Khachatryan et al. [CMS Collaboration]. JHEP 1406, 090 (2014)
- 348. "Measurements of Direct CP Violating Asymmetries in Charmless Decays of Bottom Baryons", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 113, no. 24, 242001 (2014)
- 349. "Measurement of WZ and ZZ production in pp collisions at  $\sqrt{s} = 8$  TeV in final states with b-tagged jets", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 74, no. 8, 2973 (2014)
- 350. "Measurement of the ZZ production cross section using the full CDF II data set", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 89, no. 11, 112001 (2014)
- 351. "Alignment of the CMS tracker with LHC and cosmic ray data", S. Chatrchyan *et al.* [CMS Collaboration]. JINST 9, P06009 (2014)
- 352. "Invariant-mass distribution of jet pairs produced in association with a W boson in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV using the full CDF Run II data set", T. Aaltonen et al. [CDF Collaboration]. Phys. Rev. D 89, no. 9, 092001 (2014)
- 353. "Study of Top-Quark Production and Decays involving a Tau Lepton at CDF and Limits on a Charged-Higgs Boson Contribution", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 89, no. 9, 091101 (2014)
- 354. "Observation of s-channel production of single top quarks at the Tevatron", T. A. Aaltonen et al. [CDF and D0 Collaborations]. Phys. Rev. Lett. 112, 231803 (2014)
- 355. "Search for new physics in the multijet and missing transverse momentum final state in proton-proton collisions at  $\sqrt{s}=8$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1406, 055 (2014)
- 356. "Measurements of the  $t\bar{t}$  charge asymmetry using the dilepton decay channel in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1404, 191 (2014)
- 357. "Search for s-Channel Single-Top-Quark Production in Events with Missing Energy Plus Jets in  $p\bar{p}$  Collisions at  $\sqrt{s}$  =1.96??TeV", T. A. Aaltonen et al. [CDF Collaboration]. Phys. Rev. Lett. 112, no. 23, 231805 (2014)

- 358. "Indirect measurement of  $\sin^2 \theta_W$  (or  $M_W$ ) using  $\mu^+\mu^-$  pairs from  $\gamma^*/Z$  bosons produced in  $p\bar{p}$  collisions at a center-of-momentum energy of 1.96 TeV", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 89, no. 7, 072005 (2014)
- 359. "Search for W'  $\rightarrow$  tb decays in the lepton + jets final state in pp collisions at  $\sqrt{s} = 8$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1405, 108 (2014)
- 360. "Measurement of the production cross sections for a Z boson and one or more b jets in pp collisions at sqrt(s) = 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1406, 120 (2014)
- 361. "Measurement of inclusive W and Z boson production cross sections in pp collisions at  $\sqrt{s}$  = 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 112, 191802 (2014)
- 362. "Evidence for s-channel Single-Top-Quark Production in Events with one Charged Lepton and two Jets at CDF", T. A. Aaltonen et al. [CDF Collaboration]. Phys. Rev. Lett. 112, 231804 (2014)
- 363. "Evidence for the direct decay of the 125 GeV Higgs boson to fermions", S. Chatrchyan *et al.* [CMS Collaboration]. Nature Phys. 10, 557 (2014)
- 364. "Evidence for the 125 GeV Higgs boson decaying to a pair of  $\tau$  leptons", S. Chatrchyan et al. [CMS Collaboration]. JHEP 1405, 104 (2014)
- 365. "Studies of dijet transverse momentum balance and pseudorapidity distributions in pPb collisions at  $\sqrt{s_{\mathrm{NN}}} = 5.02\,$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 74, no. 7, 2951 (2014)
- 366. "Observation of the associated production of a single top quark and a W boson in pp collisions at  $\sqrt{s}$  =8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 112, no. 23, 231802 (2014)
- 367. "Measurement of the  $t\bar{t}$  production cross section in the dilepton channel in pp collisions at  $\sqrt{s}=8$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1402, 024 (2014), [JHEP 1402, 102 (2014)]
- 368. "Measurement of the production cross section for a W boson and two b jets in pp collisions at  $\sqrt{s}$ =7 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 735, 204 (2014)
- 369. "Measurement of four-jet production in proton-proton collisions at  $\sqrt{s} = 7?$ ? TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 89, no. 9, 092010 (2014)
- 370. "Event activity dependence of Y(nS) production in  $\sqrt{s_{NN}}$ =5.02 TeV pPb and  $\sqrt{s}$ =2.76 TeV pp collisions", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1404, 103 (2014)
- 371. "Measurement of the muon charge asymmetry in inclusive  $pp \to W + X$  production at  $\sqrt{s} = 7$  TeV and an improved determination of light parton distribution functions", S. Chatrchyan et al. [CMS Collaboration]. Phys. Rev. D 90, no. 3, 032004 (2014)
- 372. "Study of double parton scattering using W + 2-jet events in proton-proton collisions at  $\sqrt{s}$  = 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1403, 032 (2014)
- 373. "Measurement of the properties of a Higgs boson in the four-lepton final state", S. Chatrchyan et al. [CMS Collaboration]. Phys. Rev. D 89, no. 9, 092007 (2014)
- 374. "Evidence of b-Jet Quenching in PbPb Collisions at  $\sqrt{s_{NN}} = 2.76?$ ?TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 113, no. 13, 132301 (2014), [Phys. Rev. Lett. 115, no. 2, 029903 (2015)]
- 375. "Search for Flavor-Changing Neutral Currents in Top-Quark Decays  $t \to Zq$  in pp Collisions at  $\sqrt{s} = 8?$ ?TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 112, no. 17, 171802 (2014)
- 376. "Search for top squark and higgsino production using diphoton Higgs boson decays", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 112, 161802 (2014)
- 377. "Measurement of the t t-bar production cross section in the dilepton channel in pp collisions at sqrt(s) = 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1402, 024 (2014)
- 378. "Measurement of Higgs boson production and properties in the WW decay channel with leptonic final states", S. Chatrchyan et al. [CMS Collaboration]. JHEP 1401. 096 (2014)

- 379. "Inclusive search for a vector-like T quark with charge 2/3 in pp collisions at sqrt(s) = 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 729, 149 (2014)
- 380. "Search for new physics in events with same-sign dileptons and jets in pp collisions at sqrt(s) = 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1401, 163 (2014)
- 381. "Searches for light- and heavy-flavour three-jet resonances in pp collisions at sqrt(s) = 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 730, 193 (2014)
- 382. "Measurement of the differential and double-differential Drell-Yan cross sections in protonproton collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1312, 030 (2013)
- 383. "Search for a dijet resonance in events with jets and missing transverse energy in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 88, 092004 (2013)
- 384. "Jet and underlying event properties as a function of charged-particle multiplicity in proton—anti-proton collisions at  $\sqrt{s}=7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 73, 2674 (2013)
- 385. "Search for the standard model Higgs boson produced in association with a W or a Z boson and decaying to bottom quarks", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 89, 012003 (2014)
- 386. "Rapidity distributions in exclusive Z + jet and  $\gamma$  + jet events in pp collisions at  $\sqrt{s}$ =7 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 88, 112009 (2013)
- 387. "Measurement of the cross section and angular correlations for associated production of a Z boson with b hadrons in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1312, 039 (2013)
- 388. "Measurement of associated W + charm production in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration].
- 389. "Modification of jet shapes in PbPb collisions at sqrt(s[NN]) = 2.76 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 730, 243 (2014)
- 390. "Search for the production of ZW and ZZ boson pairs decaying into charged leptons and jets in proton-antiproton collisions at  $\sqrt{s} = 1.96$  TeV", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 88, 092002 (2013)
- 391. "Observation of D0-D0bar Mixing using the CDF II Detector", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 111, 231802 (2013)
- 392. "Searches for new physics using the  $t\bar{t}$  invariant mass distribution in pp collisions at  $\sqrt{s}$ =8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 111, 211804 (2013)
- 393. "Measurement of the production cross section for  $Z\gamma \to \nu\bar{\nu}\gamma$  in pp collisions at  $\sqrt{s}=7$  TeV and limits on  $ZZ\gamma$  and  $Z\gamma\gamma$  triple gauge boson couplings", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1310, 164 (2013)
- 394. "Search for a new bottomonium state decaying to  $\Upsilon(1S)\pi^+\pi^-$  in pp collisions at  $\sqrt{s}=8$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 727, 57 (2013)
- 395. "A Direct Measurement of the Total Decay Width of the Top Quark", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 111, 202001 (2013)
- 396. "Measurement of the W-boson helicity in top-quark decays from  $t\bar{t}$  production in lepton+jets events in pp collisions at  $\sqrt{s}=7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1310, 167 (2013)
- 397. "Angular analysis and branching fraction measurement of the decay  $B^0 \to K^{*0} \mu^+ \mu^-$ ", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 727, 77 (2013)
- 398. "Production of kshort, kstar(892) and phi(1020) in minimum bias events and kshort and lambda in jets in pbar p collisions at sqrt(s)=1.96 TeV", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 88, 092005 (2013)
- 399. "Evidence for a bottom baryon resonance  $\Lambda_b*$  in CDF data", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 88, 071101 (2013)

- 400. "Search for top-squark pair production in the single-lepton final state in pp collisions at  $\sqrt{s}$  = 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 73, 2677 (2013)
- 401. "Measurement of the leptonic asymmetry in ttbar events produced in ppbar collisions at sqrt(s)=1.96 TeV", T. A. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 88, 072003 (2013)
- 402. "Combination of CDF and D0 W-Boson Mass Measurements", T. A. Aaltonen *et al.* [CDF and D0 Collaborations]. Phys. Rev. D 88, 052018 (2013)
- 403. "Measurement of the prompt  $J/\psi$  and  $\psi(2S)$  polarizations in pp collisions at  $\sqrt{s}=7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 727, 381 (2013)
- 404. "Search for a Higgs boson decaying into a Z and a photon in pp collisions at  $\sqrt{s} = 7$  and 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 726, 587 (2013)
- 405. "Measurement of the B(s) to mu+ mu- branching fraction and search for B0 to mu+ mu- with the CMS Experiment", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 111, 101804 (2013)
- 406. "Determination of the top-quark pole mass and strong coupling constant from the  $t\bar{t}$  production cross section in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration]. Phys. Lett. B 728, 496 (2014)
- 407. "Indirect measurement of  $sin^2\theta_W$  ( $M_W$ ) using e+e- pairs in the Z-boson region with  $p\bar{p}$  collisions at a center-of-momentum energy of 1.96 TeV", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 88, 072002 (2013)
- 408. "A signature-based search for delayed photons in exclusive photon plus missing transverse energy events from  $p\bar{p}$  collisions with  $\sqrt{s}=1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 88, 031103 (2013)
- 409. "The performance of the CMS muon detector in proton-proton collisions at sqrt(s) = 7 TeV at the LHC", S. Chatrchyan *et al.* [CMS Collaboration]. JINST 8, P11002 (2013)
- 410. "Search for top squarks in R-parity-violating supersymmetry using three or more leptons and b-tagged jets", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 111, 221801 (2013)
- 411. "Measurement of the Differential Cross Section  $d\sigma/d(\cos\theta t)$  for Top-Quark Pair Production in p-pbar Collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen et al. [CDF Collaboration]. Phys. Rev. Lett. 111, 182002 (2013)
- 412. "Energy calibration and resolution of the CMS electromagnetic calorimeter in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JINST 8, P09009 (2013)
- 413. "Measurement of the  $W^+W^-$  Cross section in pp Collisions at  $\sqrt{s}=7$  TeV and Limits on Anomalous  $WW\gamma$  and WWZ couplings", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 73, 2610 (2013)
- 414. "Searches for the Higgs boson decaying to  $W^+W^- \to \ell^+\nu\ell^-\bar{\nu}$  with the CDF II detector", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 88, 052012 (2013)
- 415. "Measurement of the hadronic activity in events with a Z and two jets and extraction of the cross section for the electroweak production of a Z with two jets in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1310, 101 (2013)
- 416. "Measurement of neutral strange particle production in the underlying event in proton-proton collisions at  $\operatorname{sqrt}(s) = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 88, 052001 (2013)
- 417. "Study of exclusive two-photon production of  $W^+W^-$  in pp collisions at  $\sqrt{s}=7$  TeV and constraints on anomalous quartic gauge couplings", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1307, 116 (2013)
- 418. "Top-quark mass measurement in events with jets and missing transverse energy using the full CDF data set", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 88, no. 1, 011101 (2013)

- 419. "Search for gluino mediated bottom- and top-squark production in multijet final states in pp collisions at 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 725, 243 (2013)
- 420. "Multiplicity and transverse momentum dependence of two- and four-particle correlations in pPb and PbPb collisions", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 724, 213 (2013)
- 421. "Searches for long-lived charged particles in pp collisions at  $\sqrt{s}$ =7 and 8 TeV", S. Chatrchyan et al. [CMS Collaboration]. JHEP 1307, 122 (2013)
- 422. "Measurement of the top-quark pair production cross-section in events with two leptons and bottom-quark jets using the full CDF data set", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett., [Phys. Rev. D 88, 091103 (2013)]
- 423. "Measurement of the ratio of the inclusive 3-jet cross section to the inclusive 2-jet cross section in pp collisions at  $\sqrt{s} = 7$  TeV and first determination of the strong coupling constant in the TeV range", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 73, 2604 (2013)
- 424. "Measurement of the  $\Lambda_b^0$  lifetime in pp collisions at  $\sqrt{s}=7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 07, 163 (2013)
- 425. "Measurement of masses in the  $t\bar{t}$  system by kinematic endpoints in pp collisions at  $\sqrt{s}=7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 73, 2494 (2013)
- 426. "Exclusion of exotic top-like quarks with -4/3 electric charge using jet-charge tagging in single-lepton ttbar events at CDF", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 88, 032003 (2013)
- 427. "Search for a standard-model-like Higgs boson with a mass in the range 145 to 1000 GeV at the LHC", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 73, 2469 (2013)
- 428. "Higgs Boson Studies at the Tevatron", T. Aaltonen *et al.* [CDF and D0 Collaborations]. Phys. Rev. D 88, 052014 (2013)
- 429. "Measurement of  $R = \mathcal{B}(t \to Wb)/\mathcal{B}(t \to Wq)$  in Top-quark-pair Decays using Lepton+jets Events and the Full CDF Run II Data set", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 87, 111101 (2013)
- 430. "Measurement of the cross section for direct-photon production in association with a heavy quark in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 111, 042003 (2013)
- 431. "Measurement of the  $\Upsilon(1S), \Upsilon(2S), \text{ and } \Upsilon(3S) \text{ cross sections in pp collisions at } \sqrt{s} = 7 \text{ TeV}$ ", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 727, 101 (2013)
- 432. "Search for microscopic black holes in pp collisions at  $\sqrt{s}=8$  TeV", S. Chatrchyan et al. [CMS Collaboration]. JHEP 1307, 178 (2013)
- 433. "Studies of jet mass in dijet and W/Z + jet events", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1305, 090 (2013)
- 434. "Observation of a new boson with mass near 125 GeV in pp collisions at  $\sqrt{s} = 7$  and 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1306, 081 (2013)
- 435. "Measurement of associated production of vector bosons and top quark-antiquark pairs at sqrt(s) = 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 110, 172002 (2013)
- 436. "Search for supersymmetry in hadronic final states with missing transverse energy using the variables AlphaT and b-quark multiplicity in pp collisions at 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 73, 2568 (2013)
- 437. "Search for pair-production of strongly-interacting particles decaying to pairs of jets in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 111, 031802 (2013)
- 438. "Search for the standard model Higgs boson produced in association with a top-quark pair in pp collisions at the LHC", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1305, 145 (2013)

- 439. "Search for narrow resonances using the dijet mass spectrum in pp collisions at sqrt(s) = 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 87, 114015 (2013)
- 440. "Search for Supersymmetry with Like-Sign Lepton-Tau Events at CDF", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 110, no. 20, 201802 (2013)
- 441. "Measurement of the X(3872) production cross section via decays to J/psi pi in pp collisions at sqrt(s) = 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1304, 154 (2013)
- 442. "Search for a Higgs boson decaying into a b-quark pair and produced in association with b quarks in proton-proton collisions at 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 722, 207 (2013)
- 443. "Search for new physics in final states with a lepton and missing transverse energy in pp collisions at the LHC", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 87, no. 7, 072005 (2013)
- 444. "Study of the underlying event at forward rapidity in pp collisions at  $\sqrt{s} = 0.9$ , 2.76, and 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1304, 072 (2013)
- 445. "Searches for Higgs bosons in pp collisions at sqrt(s) = 7 and 8 TeV in the context of four-generation and fermiophobic models", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 725, 36 (2013)
- 446. "Search for pair-produced dijet resonances in four-jet final states in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 110, 141802 (2013)
- 447. "Measurement of the  $t\bar{t}$  production cross section in the all-jet final state in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1305, 065 (2013)
- 448. "Search for  $B_s \to \mu^+\mu^-$  and  $B_d \to \mu^+\mu^-$  decays with the full CDF Run II data set", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 87, 072003 (2013)
- 449. "Combination of searches for the Higgs boson using the full CDF data set", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 88, 052013 (2013)
- 450. "Measurement of the top-antitop production cross section in the tau+jets channel in pp collisions at sqrt(s) = 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 73, 2386 (2013)
- 451. "Search for contact interactions using the inclusive jet  $p_T$  spectrum in  $p_T$  collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 87, 052017 (2013)
- 452. "Measurement of W+W- and ZZ production cross sections in pp collisions at sqrt(s) = 8 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 721, 190 (2013)
- 453. "Updated search for the standard model Higgs boson in events with jets and missing transverse energy using the full CDF data set", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 87, 052008 (2013)
- 454. "Search for physics beyond the standard model in events with  $\tau$  leptons, jets, and large transverse momentum imbalance in pp collisions at  $\sqrt{s}=7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 73, 2493 (2013)
- 455. "Interpretation of Searches for Supersymmetry with simplified Models", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 88, 052017 (2013)
- 456. "Event shapes and azimuthal correlations in Z + jets events in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 722, 238 (2013)
- 457. "Search for supersymmetry in events with opposite-sign dileptons and missing transverse energy using an artificial neural network", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 87, 072001 (2013)
- 458. "Search for supersymmetry in pp collisions at  $\sqrt{s} = 7$  TeV in events with a single lepton, jets, and missing transverse momentum", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 73, 2404 (2013)
- 459. "Study of the Mass and Spin-Parity of the Higgs Boson Candidate Via Its Decays to Z Boson Pairs", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 110. 081803 (2013)

- 460. "Measurements of differential jet cross sections in proton-proton collisions at  $\sqrt{s} = 7$  TeV with the CMS detector", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 87, 112002 (2013)
- 461. "Measurement of the  $t\bar{t}$  production cross section in pp collisions at  $\sqrt{s} = 7$  TeV with lepton + jets final states", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 720, 83 (2013)
- 462. "Inclusive search for supersymmetry using the razor variables in pp collisions at  $\sqrt{s}=7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 111, 081802 (2013)
- 463. "Search for new physics in events with same-sign dileptons and b jets in pp collisions at  $\sqrt{s} = 8$  TeV", S. Chatrchyan et al. [CMS Collaboration]. JHEP 1303, 037 (2013), [Erratumibid. 1307, 041 (2013)]
- 464. "Search for heavy narrow dilepton resonances in pp collisions at  $\sqrt{s} = 7$  TeV and  $\sqrt{s} = 8$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 720, 63 (2013)
- 465. "Search for contact interactions in  $\mu^+\mu^-$  events in pp collisions at  $\sqrt{s}=7$  TeV", S. Chatrchyan et al. [CMS Collaboration]. Phys. Rev. D 87, no. 3, 032001 (2013)
- 466. "Measurement of the cross section for prompt isolated diphoton production using the full CDF Run II data sample", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 110, no. 10, 101801 (2013)
- 467. "Search for a two-Higgs-boson doublet using a simplified model in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 110, no. 12, 121801 (2013)
- 468. "Search for heavy resonances in the W/Z-tagged dijet mass spectrum in pp collisions at 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 723, 280 (2013)
- 469. "Search for long-lived particles decaying to photons and missing energy in proton-proton collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 722, 273 (2013)
- 470. "Search for exotic resonances decaying into WZ/ZZ in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1302, 036 (2013)
- 471. "Search for Resonant Top-Antitop Production in the Lepton Plus Jets Decay Mode Using the Full CDF Data Set", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 110, no. 12, 121802 (2013)
- 472. "Measurement of the ZZ production cross section and search for anomalous couplings in 2 l2l ' final states in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et~al. [CMS Collaboration]. JHEP 1301, 063 (2013)
- 473. "Search for new physics in events with photons, jets, and missing transverse energy in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1303, 111 (2013)
- 474. "Measurement of W-Boson Polarization in Top-quark Decay using the Full CDF Run II Data Set", T. Aaltonen et al. [CDF Collaboration]. Phys. Rev. D 87, 031104 (2013)
- 475. "Identification of b-quark jets with the CMS experiment", S. Chatrchyan *et al.* [CMS Collaboration]. JINST 8, P04013 (2013)
- 476. "Search for Z' resonances decaying to  $t\bar{t}$  in dilepton+jets final states in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration]. Phys. Rev. D 87, 072002 (2013)
- 477. "Search for supersymmetry in final states with a single lepton, b-quark jets, and missing transverse energy in proton-proton collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration]. Phys. Rev. D 87, no. 5, 052006 (2013)
- 478. "Search in leptonic channels for heavy resonances decaying to long-lived neutral particles", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1302, 085 (2013)
- 479. "Measurement of differential top-quark pair production cross sections in pp colisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Eur. Phys. J. C 73, 2339 (2013)
- 480. "Measurement of the top quark forward-backward production asymmetry and its dependence on event kinematic properties", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 87, 092002 (2013)

- 481. "Search for supersymmetry in final states with missing transverse energy and 0, 1, 2, or at least 3 b-quark jets in 7 TeV pp collisions using the variable alphaT", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP 1301, 077 (2013)
- 482. "Search for a non-standard-model Higgs boson decaying to a pair of new light bosons in four-muon final states", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 726, 564 (2013)
- 483. "Measurement of the sum of WW and WZ production with W+dijet events in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration]. Eur. Phys. J. C 73, 2283 (2013)
- 484. "Search for heavy quarks decaying into a top quark and a W or Z boson using lepton + jets events in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et~al. [CMS Collaboration]. JHEP 1301, 154 (2013)
- 485. "Measurement of the inelastic proton-proton cross section at  $\sqrt{s}=7$  TeV", S. Chatrchyan et al. [CMS Collaboration]. Phys. Lett. B 722, 5 (2013)
- 486. "Measurement of the mass difference between top and antitop quarks", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D 87, no. 5, 052013 (2013)
- 487. "Search for pair production of third-generation leptoquarks and top squarks in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 110, 081801 (2013)
- 488. "Observation of long-range near-side angular correlations in proton-lead collisions at the LHC", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 718, 795 (2013)
- 489. "Search for excited leptons in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 720, 309 (2013)
- 490. "Search for narrow resonances and quantum black holes in inclusive and b-tagged dijet mass spectra from pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration]. JHEP 1301, 013 (2013)
- 491. "Measurement of the  $B_c^-$  meson lifetime in the decay  $B_c^- \to J/\psi \ \pi^-$ ", T. Aaltonen et al. [CDF Collaboration]. Phys. Rev. D 87, 011101 (2013)
- 492. "Search for fractionally charged particles in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration]. Phys. Rev. D 87, no. 9, 092008 (2013)
- 493. "Search for supersymmetry in events with photons and low missing transverse energy in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 719, 42 (2013)
- 494. "Search for anomalous production of highly boosted Z bosons decaying to dimuons in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration]. Phys. Lett. B 722, 28 (2013)
- 495. "Search for a narrow spin-2 resonance decaying to a pair of Z vector bosons in the semileptonic final state", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 718, 1208 (2013)
- 496. "Evidence for associated production of a single top quark and W boson in pp collisions at  $\sqrt{s}=7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 110, 022003 (2013)
- 497. "Measurement of the Y1S, Y2S and Y3S polarizations in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 110, 081802 (2013)
- 498. "Observation of the Production of a W Boson in Association with a Single Charm Quark", T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. 110, no. 7, 071801 (2013)
- 499. "Observation of a diffractive contribution to dijet production in proton-proton collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D 87, 012006 (2013)
- 500. "Search for the Higgs boson in the all-hadronic final state using the full CDF data set", T. Aaltonen et al. [CDF Collaboration]. JHEP 1302, 004 (2013)
- 501. "Measurement of the azimuthal anisotropy of neutral pions in PbPb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. Lett. 110. 042301 (2013)

- 502. "Search for flavor changing neutral currents in top quark decays in pp collisions at 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 718, 1252 (2013)
- 503. "Search for a W' boson decaying to a bottom quark and a top quark in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration]. Phys. Lett. B 718, 1229 (2013)
- 504. "Forward-backward asymmetry of Drell-Yan lepton pairs in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 718, 752 (2013)
- 505. "Search for new physics in events with opposite-sign leptons, jets, and missing transverse energy in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 718, 815 (2013)
- 506. "W boson polarization measurement in the  $t\bar{t}$  dilepton channel using the CDF II Detector", T. Aaltonen et al. [CDF Collaboration]. Phys. Lett. B 722, 48 (2013)
- 507. "Studies of jet quenching using isolated-photon+jet correlations in PbPb and pp collisions at  $\sqrt{s_{NN}} = 2.76$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B 718, 773 (2013)
- 508. "Measurement of the elliptic anisotropy of charged particles produced in PbPb collisions at nucleon-nucleon center-of-mass energy = 2.76 TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. C 87, 014902 (2013)
- 509. "Search for a heavy vector boson decaying to two gluons in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV ", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **86**, 112002 (2012).
- 510. "Search for third-generation leptoquarks and scalar bottom quarks in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1212**, 055 (2012).
- 511. "Observation of Z decays to four leptons with the CMS detector at the LHC", S. Chatrchyan et al. [CMS Collaboration], JHEP **1212**, 034 (2012).
- 512. "Search for heavy neutrinos and W[R] bosons with right-handed couplings in a left-right symmetric model in pp collisions at sqrt(s) = 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **109**, 261802 (2012).
- 513. "Search for heavy lepton partners of neutrinos in proton-proton collisions in the context of the type III seesaw mechanism", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **718**, 348 (2012).
- 514. "Measurement of the relative prompt production rate of chi(c2) and chi(c1) in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Eur. Phys. J. C **72**, 2251 (2012).
- 515. "Search for electroweak production of charginos and neutralinos using leptonic final states in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1211**, 147 (2012).
- 516. "Measurement of the single-top-quark t-channel cross section in pp collisions at  $\sqrt{s} = 7$  TeV ", S. Chatrchyan et al. [CMS Collaboration], JHEP **1212**, 035 (2012).
- 517. "Search for resonant  $t\bar{t}$  production in lepton+jets events in pp collisions at  $\sqrt{s}=7$  TeV ", S. Chatrchyan et~al. [CMS Collaboration], JHEP **1212**, 015 (2012).
- 518. "Search for the standard model Higgs boson produced in association with W and Z bosons in pp collisions at  $\sqrt{s}=7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1211**, 088 (2012).
- 519. "Search for a narrow spin-2 resonance decaying to a pair of Z vector bosons in the semileptonic final state", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **718**, 1208 (2013)
- 520. "Measurement of the top-quark mass in  $t\bar{t}$  events with dilepton final states in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Eur. Phys. J. C **72**, 2202 (2012).
- 521. "Measurement of the top-quark mass in  $t\bar{t}$  events with lepton+jets final states in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1212**, 105 (2012).
- 522. "Observation of a diffractive contribution to dijet production in proton-proton collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Rev. D **87**. 012006 (2013)

- 523. "Search for exclusive or semi-exclusive photon pair production and observation of exclusive and semi-exclusive electron pair production in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration], JHEP **1211**, 080 (2012).
- 524. "Combined search for the quarks of a sequential fourth generation", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. D **86**, 112003 (2012).
- 525. "Search for pair produced fourth-generation up-type quarks in pp collisions at  $\sqrt{s} = 7$  TeV with a lepton in the final state", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **718**, 307 (2012).
- 526. "Search for the Higgs boson in the all-hadronic final state using the full CDF data set", T. Aaltonen *et al.* [CDF Collaboration], JHEP **1302**, 004 (2013)
- 527. "Measurements of the Top-quark Mass and the  $t\bar{t}$  Cross Section in the Hadronic  $\tau+$  Jets Decay Channel at  $\sqrt{s}=1.96$  TeV", T. Aaltonen et al. [CDF Collaboration], Phys. Rev. Lett. **109**, 192001 (2012).
- 528. "Search for supersymmetry in events with b-quark jets and missing transverse energy in pp collisions at 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. D **86**, 072010 (2012).
- 529. "Study of the dijet mass spectrum in  $pp \to W+$  jets events at  $\sqrt{s}=7$  TeV", S. Chatrchyan et al. [CMS Collaboration], Phys. Rev. Lett. **109**, 251801 (2012).
- 530. "Measurement of the Bottom-Strange Meson Mixing Phase in the Full CDF Data Set", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **109**, 171802 (2012).
- 531. "Search for three-jet resonances in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **718**, 329 (2012).
- 532. "Observation of sequential Upsilon suppression in PbPb collisions", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **109**, 222301 (2012).
- 533. "Measurement of the  $t\bar{t}$  production cross section in the dilepton channel in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1211**, 067 (2012).
- 534. "Search for the standard model Higgs boson produced in association with top quarks using the full CDF data set", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **109**, 181802 (2012).
- 535. "Search for flavor changing neutral currents in top quark decays in pp collisions at 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **718**, 1252 (2013)
- 536. "Search for a W' boson decaying to a bottom quark and a top quark in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **718**, 1229 (2013)
- 537. "Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC ", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **716**, 30 (2012).
- 538. "Transverse momentum cross section of  $e^+e^-$  pairs in the Z-boson region from  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **86**, 052010 (2012).
- 539. "Precision Top-Quark Mass Measurements at CDF", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **109**, 152003 (2012).
- 540. "Evidence for a particle produced in association with weak bosons and decaying to a bottom-antibottom quark pair in Higgs boson searches at the Tevatron", T. Aaltonen *et al.* [CDF and D0 Collaborations]. Phys. Rev. Lett. **109**, 071804 (2012).
- 541. "Search for a Higgs boson in the diphoton final state using the full CDF data set from proton-antiproton collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Lett. B **717**, 173 (2012).
- 542. "Search for heavy Majorana neutrinos in  $\mu^+\mu^+[\mu^-\mu^-]$  and  $e^+e^+[e^-e^-]$  events in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **717**, 109 (2012).
- 543. "Search for pair production of first- and second-generation scalar leptoquarks in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. D **86**, 052013 (2012).

- 544. "Novel inclusive search for the Higgs boson in the four-lepton final state at CDF", T. Aaltonen et al. [CDF Collaboration], Phys. Rev. D 86, 072012 (2012).
- 545. "Study of the inclusive production of charged pions, kaons, and protons in pp collisions at  $\sqrt{s} = 0.9$ , 2.76, and 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration], Eur. Phys. J. C **72**, 2164 (2012).
- 546. "Forward-backward asymmetry of Drell-Yan lepton pairs in pp collisions at  $\sqrt{s} = 7$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **718**, 752 (2013)
- 547. "Search for Neutral Higgs Bosons in Events with Multiple Bottom Quarks at the Tevatron ", T. Aaltonen *et al.* [CDF and D0 Collaborations]. Phys. Rev. D **86**, 091101 (2012).
- 548. "A search for a doubly-charged Higgs boson in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration], Eur. Phys. J. C 72, 2189 (2012).
- 549. "Measurement of the underlying event activity in pp collisions at  $\sqrt{s} = 0.9$  and 7 TeV with the novel jet-area/median approach", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1208**, 130 (2012).
- 550. "Measurement of the difference of CP–violating asymmetries in  $D^0 \to K^+K^-$  and  $D^0 \to \pi^+\pi^-$  decays at CDF", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **109**, 111801 (2012).
- 551. "Search for new physics in the multijet and missing transverse momentum final state in proton-proton collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **109**, 171803 (2012).
- 552. "Search for supersymmetry in hadronic final states using MT2 in pp collisions at  $\sqrt{s}=7$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1210**, 018 (2012).
- 553. "Search for the standard model Higgs boson decaying to a  $b\bar{b}$  pair in events with no charged leptons and large missing transverse energy using the full CDF data set", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **109**, 111805 (2012).
- 554. "Combined search for the standard model Higgs boson decaying to a bb pair using the full CDF data set", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **109**, 111802 (2012).
- 555. "Search for the standard model Higgs boson decaying to a bb pair in events with two oppositely-charged leptons using the full CDF data set", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **109**, 111803 (2012).
- 556. "Search for the standard model Higgs boson decaying to a bb pair in events with one charged lepton and large missing transverse energy using the full CDF data set", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **109**, 111804 (2012).
- 557. "Search for a fermiophobic Higgs boson in pp collisions at  $\sqrt{s} = 7$  TeV ", S. Chatrchyan et al. [CMS Collaboration], JHEP **1209**, 111 (2012).
- 558. "Combination of the top-quark mass measurements from the Tevatron collider", T. Aaltonen et al. [CDF and D0 Collaborations]. Phys. Rev. D 86, 092003 (2012).
- 559. "Measurement of CP-violation asymmetries in  $D^0 \to K_S \pi^+ \pi^-$ ", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **86**, 032007 (2012).
- 560. "Search for new physics with long-lived particles decaying to photons and missing energy in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1211**, 172 (2012).
- 561. "Search for stopped long-lived particles produced in pp collisions at  $\sqrt{s} = 7$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1208**, 026 (2012).
- 562. "Inclusive and differential measurements of the  $t\bar{t}$  charge asymmetry in proton-proton collisions at 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **717**, 129 (2012).
- 563. "Search for a light pseudoscalar Higgs boson in the dimuon decay channel in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **109**, 121801 (2012).
- 564. "Search for dark matter and large extra dimensions in monojet events in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration]. JHEP **1209**. 094 (2012).

- 565. "Search for the standard model Higgs boson produced in association with a  $W^{\pm}$  boson with 7.5 fb<sup>-1</sup> integrated luminosity at CDF", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **86**, 032011 (2012).
- 566. "Performance of CMS muon reconstruction in pp collision events at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration], JINST 7, P10002 (2012).
- 567. "Diffractive Dijet Production in  $\bar{p}p$  Collisions at  $\sqrt{s} = 1.96$  TeV ", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **86**, 032009 (2012).
- 568. "Search for new physics in events with opposite-sign leptons, jets, and missing transverse energy in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et~al. [CMS Collaboration], Phys. Lett. B **718**, 815 (2013)
- 569. "Search for charge-asymmetric production of W" bosons in top pair + jet events from pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration], Phys. Lett. B **717**, 351 (2012).
- 570. "Measurement of the electron charge asymmetry in inclusive W production in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **109**, 111806 (2012).
- 571. "Search for narrow resonances in dilepton mass spectra in pp collisions at  $\sqrt{s}=7$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **714**, 158 (2012).
- 572. "Search for high mass resonances decaying into  $\tau^-$  lepton pairs in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **716**, 82 (2012).
- 573. "Search for a W' or Techni- $\rho$  Decaying into WZ in pp Collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration], Phys. Rev. Lett. 109, 141801 (2012).
- 574. "Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **109**, 071803 (2012).
- 575. "Study of W boson production in PbPb and pp collisions at  $\sqrt{s_{NN}} = 2.76$  TeV", S. Chatrchyan et al. [CMS Collaboration], Phys. Lett. B **715**, 66 (2012).
- 576. "Measurement of jet fragmentation into charged particles in pp and PbPb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1210**, 087 (2012).
- 577. "Search for a light charged Higgs boson in top quark decays in pp collisions at  $\sqrt{s} = 7$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1207**, 143 (2012).
- 578. "Search for new physics in events with same-sign dileptons and b-tagged jets in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration], JHEP **1208**, 110 (2012).
- 579. "Measurement of the pseudorapidity and centrality dependence of the transverse energy density in PbPb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **109**, 152303 (2012).
- 580. "Measurement of the  $Lambda_b$  cross section and the  $\bar{\Lambda}(b)$  to  $Lambda_b$  ratio with  $Lambda_b$  to J/Psi  $\Lambda$  decays in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **714**, 136 (2012).
- 581. "Search for heavy long-lived charged particles in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration], Phys. Lett. B **713**, 408 (2012).
- 582. "Studies of jet quenching using isolated-photon+jet correlations in PbPb and pp collisions at  $\sqrt{s_{NN}} = 2.76$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **718**, 773 (2013)
- 583. "Observation of a new Xi(b) baryon", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **108**, 252002 (2012).
- 584. "Search for anomalous production of multilepton events in pp collisions at  $\sqrt{s}=7$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1206**, 169 (2012).
- 585. "Search for leptonic decays of W ' bosons in pp collisions at  $\sqrt{s} = 7$  TeV ", S. Chatrchyan et al. [CMS Collaboration], JHEP **1208**, 023 (2012).

Robert Than

- 586. "Search for physics beyond the standard model in events with a Z boson, jets, and missing transverse energy in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan  $et\ al.$  [CMS Collaboration], Phys. Lett. B **716**, 260 (2012).
- 587. "Shape, transverse size, and charged hadron multiplicity of jets in pp collisions at 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1206**, 160 (2012).
- 588. "Measurement of the mass difference between top and antitop quarks", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1206**, 109 (2012).
- 589. "Search for anomalous t t-bar production in the highly-boosted all-hadronic final state", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1209**, 029 (2012).
- 590. "Azimuthal anisotropy of charged particles at high transverse momenta in PbPb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **109**, 022301 (2012).
- 591. "Measurement of the Z/gamma\*+b-jet cross section in pp collisions at 7 TeV", S. Chatrchyan et al. [CMS Collaboration], JHEP **1206**, 126 (2012).
- 592. "Measurement of the elliptic anisotropy of charged particles produced in PbPb collisions at nucleon-nucleon center-of-mass energy = 2.76 TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. C **87**, 014902 (2013)
- 593. "Measurement of the underlying event in the Drell-Yan process in proton-proton collisions at  $\sqrt{s}=7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], arXiv:1204.1411 [hep-ex] 10.1140/epjc/s10052-012-2080-4 Eur. Phys. J. C **72**, 2080 (2012).
- 594. "Search for heavy bottom-like quarks in 4.9 inverse femtobarns of pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1205**, 123 (2012).
- 595. "Search for Dark Matter and Large Extra Dimensions in pp Collisions Yielding a Photon and Missing Transverse Energy", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **108**, 261803 (2012).
- 596. "Ratios of dijet production cross sections as a function of the absolute difference in rapidity between jets in proton-proton collisions at  $\sqrt{s} = 7$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], Eur. Phys. J. C **72**, 2216 (2012).
- 597. "Measurement of  $B_s^0 \to D_s^{(*)+} D_s^{(*)-}$  Branching Ratios ", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **108**, 201801 (2012).
- 598. "Measurement of the top quark pair production cross section in pp collisions at  $\sqrt{s} = 7$  TeV in dilepton final states containing a  $\tau$ ", S. Chatrchyan et~al. [CMS Collaboration], Phys. Rev. D 85, 112007 (2012).
- 599. "Search for the standard model Higgs boson produced in association with a Z Boson in 7.9 fb(-1) of p anti-p collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Lett. B **715**, 98 (2012).
- 600. "Search for heavy, top-like quark pair production in the dilepton final state in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **716**, 103 (2012).
- 601. "Search for Scalar Top Quark Production in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen et al. [CDF Collaboration], JHEP **1210**, 158 (2012).
- 602. "Search for  $B_s^0 to \mu^+ \mu^-$  and  $B^0 to \mu^+ \mu^-$  decays", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1204**, 033 (2012).
- 603. "Search for a heavy particle decaying to a top quark and a light quark in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **108**, 211805 (2012).
- 604. "Measurement of the cross section for production of  $bb^-$  bar X, decaying to muons in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1206**, 110 (2012).
- 605. "A Search for dark matter in events with one jet and missing transverse energy in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **108**, 211804 (2012).

Robert Han

- 606. "Precise measurement of the W-boson mass with the CDF II detector", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **108**, 151803 (2012).
- 607. "Measurement of the WZ Cross Section and Triple Gauge Couplings in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen et al. [CDF Collaboration], Phys. Rev. D 86, 031104 (2012).
- 608. "Search for microscopic black holes in pp collisions at  $\sqrt{s} = 7$  TeV ", S. Chatrchyan et al. [CMS Collaboration], JHEP **1204**, 061 (2012).
- 609. "Search for a dark matter candidate produced in association with a single top quark in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **108**, 201802 (2012).
- 610. "Search for quark compositeness in dijet angular distributions from pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1205**, 055 (2012).
- 611. "Combination of CDF and D0 measurements of the W boson helicity in top quark decays", T. Aaltonen *et al.* [CDF and D0 Collaborations]. Phys. Rev. D **85**, 071106 (2012).
- 612. "Jet momentum dependence of jet quenching in PbPb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **712**, 176 (2012).
- 613. "Inclusive b-jet production in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration], JHEP **1204**, 084 (2012).
- 614. "Search for the standard model Higgs boson decaying to bottom quarks in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **710**, 284 (2012).
- 615. "Search for neutral Higgs bosons decaying to  $\tau$  pairs in pp collisions at  $\sqrt{s}=7$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **713**, 68 (2012).
- 616. "Search for large extra dimensions in dimuon and dielectron events in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **711**, 15 (2012).
- 617. "Search for the standard model Higgs boson in the H to ZZ to  $2 \ell 2\nu$  channel in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1203**, 040 (2012).
- 618. "Search for the standard model Higgs boson in the H to ZZ to  $\ell\ell\tau\tau$  decay channel in pp collisions at  $\sqrt{s}=7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1203**, 081 (2012).
- 619. "Study of high-pT charged particle suppression in PbPb compared to pp collisions at  $\sqrt{s_{NN}} = 2.76$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Eur. Phys. J. C **72**, 1945 (2012).
- 620. "Search for the standard model Higgs boson in the decay channel H to ZZ to 4 leptons in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan  $et\ al.$  [CMS Collaboration], Phys. Rev. Lett. 108, 111804 (2012).
- 621. "Search for the standard model Higgs boson decaying to a W pair in the fully leptonic final state in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan  $et\ al.$  [CMS Collaboration], Phys. Lett. B **710**, 91 (2012).
- 622. "Combined results of searches for the standard model Higgs boson in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **710**, 26 (2012).
- 623. "Search for the standard model Higgs boson decaying into two photons in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **710**, 403 (2012).
- 624. "Search for a Higgs boson in the decay channel H to ZZ(\*) to q qbar  $\ell^-$  1+ in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1204**, 036 (2012).
- 625. "Search for anomalous production of multiple leptons in association with W and Z bosons at CDF", T. Aaltonen et al. [CDF Collaboration], Phys. Rev. D 85, 092001 (2012).
- 626. "Measurement of the inclusive production cross sections for forward jets and for dijet events with one forward and one central jet in pp collisions at  $\sqrt{s} = 7$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1206**, 036 (2012).
- 627. "Suppression of non-prompt  $J/\psi$ , prompt  $J/\psi$ , and Y(1S) in PbPb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1205**, 063 (2012).
- 628. "Search for a low mass Standard Model Higgs boson in the  $\tau \tau$  decay channel in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **108**, 181804 (2012).

Nobert Han

- 629. "Centrality dependence of dihadron correlations and azimuthal anisotropy harmonics in PbPb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], Eur. Phys. J. C **72**, 2012 (2012).
- 630. "Measurement of isolated photon production in pp and PbPb collisions at  $\sqrt{s_{NN}} = 2.76$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **710**, 256 (2012).
- 631. "Measurement of the charge asymmetry in top-quark pair production in proton-proton collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Lett. B **709**, 28 (2012).
- 632. "Measurement of the Top Quark Mass in the All-Hadronic Mode at CDF", T. Aaltonen *et al.* [CDF Collaboration], Phys. Lett. B **714**, 24 (2012).
- 633. "Search for Standard Model Higgs Boson Production in Association with a W Boson Using a Matrix Element Technique at CDF in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen et al. [CDF Collaboration], Phys. Rev. D 85, 072001 (2012).
- 634. "Measurement of the branching fraction  $\mathcal{B}(\Lambda_b^0 \to \Lambda_c^+ \pi^- \pi^+ \pi^-)$  at CDF", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **85**, 032003 (2012).
- 635. "Measurement of the masses and widths of the bottom baryons  $\Sigma_b^{+-}$  and  $\Sigma_b^{*+-}$ ", T. Aaltonen et al. [CDF Collaboration], Phys. Rev. D 85, 092011 (2012).
- 636. "Measurement of ZZ production in leptonic final states at  $\sqrt{s}$  of 1.96 TeV at CDF", T. Aaltonen et al. [CDF Collaboration], Phys. Rev. Lett. 108, 101801 (2012).
- 637. "Search for Standard Model Higgs Boson Production in Association with a W Boson at CDF ", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **85**, 052002 (2012).
- 638. "Measurement of the CP-Violating Phase  $\beta_s^{J/\Psi\phi}$  in  $B_s^0 \to J/\Psi\phi$  Decays with the CDF II Detector", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **85**, 072002 (2012).
- 639. "Measurements of Angular Distributions of Muons From  $\Upsilon$  Meson Decays in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **108**, 151802 (2012).
- 640. "Search for new phenomena in events with two Z bosons and missing transverse momentum in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **85**, 011104 (2012).
- 641. "Observation of Exclusive Gamma Gamma Production in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **108**, 081801 (2012).
- 642. "Search for signatures of extra dimensions in the diphoton mass spectrum at the Large Hadron Collider", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. Lett. **108**, 111801 (2012).
- 643. "Exclusive photon-photon production of muon pairs in proton-proton collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1201**, 052 (2012).
- 644. "Measurement of CP-violating asymmetries in  $D^0 \to \pi^+\pi^-$  and  $D^0 \to K^+K^-$  decays at CDF", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **85**, 012009 (2012).
- 645. "Search for high-mass resonances decaying into ZZ in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96\,\text{TeV}$ ", T. Aaltonen et al. [CDF Collaboration], Phys. Rev. D 85, 012008 (2012).
- 646. " $J/\psi$  and  $\psi_{2S}$  production in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et~al. [CMS Collaboration], JHEP **1202**, 011 (2012).
- 647. "Evidence for the charmless annihilation decay mode  $B_s^0 \to \pi^+\pi^-$ ", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **108**, 211803 (2012).
- 648. "Measurement of the Production Cross Section for Pairs of Isolated Photons in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1201**, 133 (2012).
- 649. "Measurement of the Rapidity and Transverse Momentum Distributions of Z Bosons in pp Collisions at  $\sqrt{s} = 7$  TeV ", S. Chatrchyan *et al.* [CMS Collaboration], Phys. Rev. D **85**, 032002 (2012).
- 650. "Jet Production Rates in Association with W and Z Bosons in pp Collisions at  $\sqrt{s} = 7$  TeV ", S. Chatrchyan et al. [CMS Collaboration], JHEP **1201**. 010 (2012).

- 651. "Measurement of energy flow at large pseudorapidities in pp collisions at  $\sqrt{s} = 0.9$  and 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration], JHEP **1111**, 148 (2011), [Erratum-ibid. **1202**, 055 (2012).]
- 652. "Forward Energy Flow, Central Charged-Particle Multiplicities, and Pseudorapidity Gaps in W and Z Boson Events from pp Collisions at 7 TeV", S. Chatrchyan *et al.* [CMS Collaboration], Eur. Phys. J. C **72**, 1839 (2012).
- 653. "Performance of tau-lepton reconstruction and identification in CMS", C. Collaboration *et al.* [CMS Collaboration], JINST 7, P01001 (2012).
- 654. "Search for a Higgs Boson in the Diphoton Final State in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **108**, 011801 (2012).
- 655. "Search for heavy metastable particles decaying to jet pairs in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **85**, 012007 (2012).
- 656. "Search for WZ + ZZ production with MET + jets with b enhancement at  $\sqrt{s} = 1.96$  TeV ", T. Aaltonen et al. [CDF Collaboration], Phys. Rev. D 85, 012002 (2012).
- 657. "Measurements of the Angular Distributions in the Decays  $B \to K^{(*)} \mu^+ \mu^-$  at CDF ", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **108**, 081807 (2012).
- 658. "Inclusive search for squarks and gluinos in pp collisions at  $\sqrt{s} = 7$  TeV", S. Chatrchyan et al. [CMS Collaboration], Phys. Rev. D 85, 012004 (2012).
- 659. "Study of Substructure of High Transverse Momentum Jets Produced in Proton-Antiproton Collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **85**, 091101 (2012).
- 660. "Search for Higgs Bosons Produced in Association with b-quarks", T. Aaltonen et al. [CDF Collaboration], Phys. Rev. D 85, 032005 (2012).
- 661. "Search for the Rare Radiative Decay:  $W \to \pi \gamma$  in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV", T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **85**, 032001 (2012).
- 662. "Production of  $\Lambda$ ,  $\bar{\Lambda}^0 \Xi^{\pm}$  and  $\Omega^{\pm}$  Hyperons in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV.", T. Aaltonen et al. [CDF Collaboration], Phys. Rev. D 86, 012002 (2012).
- 663. "Measurement of the branching fraction  $\mathcal{B}(\Lambda_b^0 \to \Lambda_c^+ \pi^- \pi^+ \pi^-)$  at CDF" T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D **85**, 032003 (2012)
- 664. "Measurement of ZZ production in leptonic final states at  $\sqrt{s}$  of 1.96 TeV at CDF"
  - T. Aaltonen et al. [CDF Collaboration].
  - Phys. Rev. Lett. **108**, 101801 (2012)
- 665. "Search for Standard Model Higgs Boson Production in Association with a W Boson at CDF"
  - T. Aaltonen et al. [CDF Collaboration].
  - Phys. Rev. D 85, 052002 (2012)
- 666. "Search for new phenomena in events with two Z bosons and missing transverse momentum in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV"
  - T. Aaltonen et al. [CDF Collaboration].
  - Phys. Rev. D 85, 011104 (2012)
- 667. "Observation of Exclusive Gamma Gamma Production in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV"
  - T. Aaltonen et al. [CDF Collaboration].
  - Phys. Rev. Lett. **108**, 081801 (2012)
- 668. "Measurement of CP-violating asymmetries in  $D^0 \to \pi^+\pi^-$  and  $D^0 \to K^+K^-$  decays at CDF"
  - T. Aaltonen et al. [CDF Collaboration].
  - Phys. Rev. D **85**, 012009 (2012)
- 669. "Search for high-mass resonances decaying into ZZ in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96\,\mathrm{TeV}$ "

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 85, 012008 (2012)

670. "Measurement of the weak mixing angle with the Drell-Yan process in protonproton collisions at the LHC"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. D 84, 112002 (2011)

671. "Measurement of energy flow at large pseudorapidities in pp collisions at sqrt(s) = 0.9 and 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

JHEP **1111**, 148 (2011)

672. "Search for a Vector-like Quark with Charge 2/3 in t + Z Events from pp Collisions at sqrt(s) = 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. 107, 271802 (2011)

673. "Search for a Higgs Boson in the Diphoton Final State in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **108**, 011801 (2012)

674. "Search for heavy metastable particles decaying to jet pairs in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 85, 012007 (2012)

675. "Search for Supersymmetry at the LHC in Events with Jets and Missing Transverse Energy"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. **107**, 221804 (2011)

676. "Top-quark mass measurement using events with missing transverse energy and jets at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 107, 232002 (2011)

677. "Measurements of branching fraction ratios and CP-asymmetries in suppressed  $B^- \to D(\to K^+\pi^-)K^-$  and  $B^- \to D(\to K^+\pi^-)\pi^-$  decays"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 84, 091504 (2011)

678. "Search for resonant production of  $t\bar{t}$  decaying to jets in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 84, 072003 (2011)

679. "Measurement of the t $\bar{t}$  Production Cross Section in pp Collisions at 7 TeV in Lepton + Jets Events Using b-quark Jet Identification"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. D 84, 092004 (2011)

680. "Measurement of the Differential Cross Section for Isolated Prompt Photon Production in pp Collisions at 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. D 84, 052011 (2011)

681. "Search for WZ + ZZ production with MET + jets with b enhancement at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 85, 012002 (2012)

682. "Measurement of the top-quark mass in the lepton+jets channel using a matrix element technique with the CDF II detector"

T. Aaltonen  $et\ al.$  [CDF Collaboration].

Phys. Rev. D 84, 071105 (2011)

683. "Measurements of the Angular Distributions in the Decays  $B \to K^{(*)} \mu^+ \mu^-$  at CDF"

T. Aaltonen  $et\ al.$  [CDF Collaboration].

Phys. Rev. Lett. 108, 081807 (2012)

684. "Measurement of the Drell-Yan Cross Section in pp Collisions at sqrt(s) = 7 TeV"

S. Chatrchyan  $et\ al.$  [CMS Collaboration].

JHEP **1110**, 007 (2011)

685. "Search for new physics in high  $p_T$  like-sign dilepton events at CDF II"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 107, 181801 (2011)

686. "Search for B(s) and B to dimuon decays in pp collisions at 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. 107, 191802 (2011)

687. "A Search for resonant production of  $t\bar{t}$  pairs in 4.8 fb<sup>-1</sup> of integrated luminosity of  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 84, 072004 (2011)

688. "Measurement of Polarization and Search for CP-Violation in  $B_s^0 \to \phi \phi$  Decays" T. Aaltonen *et al.* [CDF Collaboration].

Phys. Rev. Lett. 107, 261802 (2011)

689. "Search for Resonances in the Dijet Mass Spectrum from 7 TeV pp Collisions at CMS"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Lett. B **704**, 123 (2011)

690. "Measurement of the Inclusive W and Z Production Cross Sections in pp Collisions at sqrt(s) = 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

JHEP **1110**, 132 (2011)

691. "Dependence on pseudorapidity and centrality of charged hadron production in PbPb collisions at a nucleon-nucleon centre-of-mass energy of 2.76 TeV"

S. Chatrchyan et al. [CMS Collaboration].

JHEP 1108, 141 (2011)

692. "Determination of Jet Energy Calibration and Transverse Momentum Resolution in CMS"

S. Chatrchyan et al. [CMS Collaboration].

JINST 6, P11002 (2011)

693. "Search for a Heavy Top-Like Quark in  $p\bar{p}$  Collisions at  $\sqrt{s}=1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 107, 261801 (2011)

694. "Observation of the  $\Xi_b^0$  Baryon"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **107**, 102001 (2011)

695. "Search for New T' Particles in Final States with Large Jet Multiplicities and Missing Transverse Energy in ppbar Collisions at sqrt(s) = 1.96 TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **107**, 191803 (2011)

696. "Observation of the Baryonic Flavor-Changing Neutral Current Decay  $\Lambda_b \to \Lambda \mu^+ \mu^-$ "

T. Aaltonen et al. [CDF Collaboration].

Robert Han

Phys. Rev. Lett. 107, 201802 (2011)

697. "Search for Three-Jet Resonances in pp Collisions at sqrt(s) = 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. **107**, 101801 (2011)

698. "Search for  $B_s \to \mu^+\mu^-$  and  $B_d \to \mu^+\mu^-$  Decays with CDF II"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 107, 239903 (2011), [Phys. Rev. Lett. 107, 191801 (2011)]

699. "Search for supersymmetry in pp collisions at sqrt(s)=7 TeV in events with a single lepton, jets, and missing transverse momentum"

S. Chatrchyan et al. [CMS Collaboration].

JHEP **1108**, 156 (2011)

700. "A search for excited leptons in pp Collisions at sqrt(s) = 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Lett. B **704**, 143 (2011)

701. "Measurement of the Underlying Event Activity at the LHC with  $\sqrt{s} = 7$  TeV and Comparison with  $\sqrt{s} = 0.9$  TeV"

S. Chatrchyan et al. [CMS Collaboration].

JHEP **1109**, 109 (2011)

702. "Measurement of the Cross Section for Prompt Isolated Diphoton Production in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 107, 102003 (2011)

703. "Measurement of the Cross Section for Prompt Isolated Diphoton Production in  $p\bar{p}$  Collisions at  $\sqrt{s}=1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 84, 052006 (2011)

704. "Missing transverse energy performance of the CMS detector"

S. Chatrchyan et al. [CMS Collaboration].

JINST 6, P09001 (2011)

705. "Search for New Physics with a Mono-Jet and Missing Transverse Energy in pp Collisions at  $\sqrt{s} = 7$  TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. 107, 201804 (2011)

706. "Search for Higgs Bosons Produced in Association with b-quarks"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 85, 032005 (2012)

707. "Search for New Physics with Jets and Missing Transverse Momentum in pp collisions at sqrt(s) = 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

JHEP **1108**, 155 (2011)

708. "Measurement of the Strange B Meson Production Cross Section with J/Psi phi Decays in pp Collisions at sqrt(s) = 7 TeV"

S. Chatrchyan *et al.* [CMS Collaboration].

Phys. Rev. D 84, 052008 (2011)

709. "Evidence for  $t\bar{t}\gamma$  Production and Measurement of  $\sigma_t\bar{t}\gamma/\sigma_t\bar{t}$ "

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 84, 031104 (2011)

710. "Measurement of branching ratio and  $B_s^0$  lifetime in the decay  $B_s^0 \to J/\psi f_0(980)$  at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 84, 052012 (2011)

Nobert Han

711. "Search for Supersymmetry in Events with b Jets and Missing Transverse Momentum at the LHC"

S. Chatrchyan *et al.* [CMS Collaboration]. JHEP **1107**, 113 (2011)

712. "Measurement of the t-channel single top quark production cross section in pp collisions at sqrt(s) = 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. **107**, 091802 (2011)

713. "Search for Light Resonances Decaying into Pairs of Muons as a Signal of New Physics"

S. Chatrchyan *et al.* [CMS Collaboration]. JHEP **1107**, 098 (2011)

714. "Search for Same-Sign Top-Quark Pair Production at sqrt(s) = 7 TeV and Limits on Flavour Changing Neutral Currents in the Top Sector"

S. Chatrchyan *et al.* [CMS Collaboration]. JHEP **1108**, 005 (2011)

715. "Measurement of the Top-antitop Production Cross Section in pp Collisions at sqrt(s)=7 TeV using the Kinematic Properties of Events with Leptons and Jets" S. Chatrchyan *et al.* [CMS Collaboration].

Eur. Phys. J. C **71**, 1721 (2011)

716. "Search for Physics Beyond the Standard Model Using Multilepton Signatures in pp Collisions at sqrt(s)=7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Lett. B **704**, 411 (2011)

717. "Measurement of the Ratio of the 3-jet to 2-jet Cross Sections in pp Collisions at sqrt(s) = 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Lett. B **702**, 336 (2011)

718. "Measurement of the Inclusive Jet Cross Section in pp Collisions at sqrt(s) = 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. **107**, 132001 (2011)

719. "Measurements of the properties of  $\Lambda_c(2595)$ ,  $\Lambda_c(2625)$ ,  $\Sigma_c(2455)$ , and  $\Sigma_c(2520)$  baryons"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 84, 012003 (2011)

720. "Improved determination of the sample composition of dimuon events produced in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Eur. Phys. J. C 71, 1720 (2011)

721. "Measurement of the t t-bar production cross section and the top quark mass in the dilepton channel in pp collisions at sqrt(s) =7 TeV"

S. Chatrchyan *et al.* [CMS Collaboration].

JHEP **1107**, 049 (2011)

722. "Search for First Generation Scalar Leptoquarks in the evjj channel in pp collisions at sqrt(s) = 7 TeV"

S. Chatrchyan *et al.* [CMS Collaboration].

Phys. Lett. B **703**, 246 (2011)

723. "Indications of suppression of excited  $\Upsilon$  states in PbPb collisions at  $\sqrt{S_{NN}} =$  2.76 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. 107, 052302 (2011)

abert Than

724. "Search for supersymmetry in events with a lepton, a photon, and large missing transverse energy in pp collisions at sqrt(s) = 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

JHEP **1106**, 093 (2011)

725. "Measurement of  $W\gamma$  and  $Z\gamma$  production in pp collisions at  $\sqrt{s} = 7$  TeV" S. Chatrchyan *et al.* [CMS Collaboration]. Phys. Lett. B **701**, 535 (2011)

726. "First Search for Multijet Resonances in  $\sqrt{s} = 1.96$  TeV  $p\bar{p}$  Collisions" T. Aaltonen *et al.* [CDF Collaboration].

Phys. Rev. Lett. 107, 042001 (2011)

727. "Long-range and short-range dihadron angular correlations in central PbPb collisions at a nucleon-nucleon center of mass energy of 2.76 TeV"

S. Chatrchyan *et al.* [CMS Collaboration]. JHEP **1107**, 076 (2011)

728. "Measurement of the  $t\bar{t}$  production cross section in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV using events with large Missing  $E_T$  and jets"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 84, 032003 (2011)

729. "Top quark mass measurement using the template method at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 83, 111101 (2011)

730. "Search for a Very Light CP-Odd Higgs Boson in Top Quark Decays from  $p^-p$  Collisions at 1.96 TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 107, 031801 (2011)

731. "Charged particle transverse momentum spectra in pp collisions at sqrt(s) = 0.9 and 7 TeV"

S. Chatrchyan  $\operatorname{et}$  al. [CMS Collaboration].

JHEP **1108**, 086 (2011)

732. "Measurement of the Polarization of W Bosons with Large Transverse Momenta in W+Jets Events at the LHC"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. 107, 021802 (2011)

733. "Search for new physics with same-sign isolated dilepton events with jets and missing transverse energy at the LHC"

S. Chatrchyan et al. [CMS Collaboration].

JHEP **1106**, 077 (2011)

734. "Measurement of the B0 production cross section in pp Collisions at sqrt(s) = 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. **106**, 252001 (2011)

735. "Measurement of the differential dijet production cross section in proton-proton collisions at sqrt(s)=7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Lett. B **700**, 187 (2011)

736. "Search for the Rare Radiative Decay:  $W \to \pi \gamma$  in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV" T. Aaltonen *et al.* [CDF Collaboration].

Phys. Rev. D 85, 032001 (2012)

737. "Measurement of the Inclusive Z Cross Section via Decays to Tau Pairs in pp Collisions at  $\sqrt{s} = 7$  TeV"

S. Chatrchyan et al. [CMS Collaboration].

JHEP **1108**, 117 (2011)

738. "Search for Neutral MSSM Higgs Bosons Decaying to Tau Pairs in pp Collisions at  $\sqrt{s} = 7$  TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. 106, 231801 (2011)

739. "Invariant Mass Distribution of Jet Pairs Produced in Association with a W boson in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **106**, 171801 (2011)

740. "Measurements of Direct CP Violating Asymmetries in Charmless Decays of Strange Bottom Mesons and Bottom Baryons"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 106, 181802 (2011)

741. "First Measurement of the Angular Coefficients of Drell-Yan  $e^+e^-$  pairs in the Z Mass Region from  $p\bar{p}$  Collisions at  $\sqrt{s}=1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **106**, 241801 (2011)

742. "Measurement of Event Shapes in Proton-Antiproton Collisions at Center-of-Mass Energy 1.96 TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 83, 112007 (2011)

743. "Search for New Dielectron Resonances and Randall-Sundrum Gravitons at the Collider Detector at Fermilab"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 107, 051801 (2011)

744. "Measurement of the Top Pair Production Cross Section in the Lepton + Jets Channel Using a Jet Flavor Discriminant"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 84, 031101 (2011)

745. "Search for Large Extra Dimensions in the Diphoton Final State at the Large Hadron Collider"

S. Chatrchyan *et al.* [CMS Collaboration].

JHEP **1105**, 085 (2011)

746. "Measurement of the lepton charge asymmetry in inclusive W production in pp collisions at  $\sqrt{s} = 7$  TeV"

S. Chatrchyan et al. [CMS Collaboration].

JHEP **1104**, 050 (2011)

747. "Measurement of the mass difference between t and  $\bar{t}$  quarks"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 106, 152001 (2011)

748. "Limits on Anomalous Trilinear Gauge Couplings in  $Z\gamma$  Events from  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **107**, 051802 (2011)

749. "Search for Production of Heavy Particles Decaying to Top Quarks and Invisible Particles in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **106**, 191801 (2011)

750. "Measurement of the  $B_s$  Lifetime in Fully and Partially Reconstructed  $B_s \to D_s^-(\phi\pi^-)X$  Decays in  $\bar{p}-p$  Collisions at  $\sqrt{s}=1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **107**, 272001 (2011)

751. "Search for Physics Beyond the Standard Model in Opposite-Sign Dilepton Events at  $\sqrt{s} = 7$  TeV"

Robert Han

S. Chatrchyan *et al.* [CMS Collaboration]. JHEP **1106**, 026 (2011)

752. "Search for Supersymmetry in pp Collisions at  $\sqrt{s} = 7$  TeV in Events with Two Photons and Missing Transverse Energy"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. **106**, 211802 (2011)

753. "Search for Resonances in the Dilepton Mass Distribution in pp Collisions at  $\sqrt(s) = 7$  TeV"

S. Chatrchyan et al. [CMS Collaboration].

JHEP **1105**, 093 (2011)

754. "Search for a W' boson decaying to a muon and a neutrino in pp collisions at  $\sqrt{s} = 7$  TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Lett. B **701**, 160 (2011)

755. "Measurement of W+W- Production and Search for the Higgs Boson in pp Collisions at sqrt(s) = 7 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Lett. B **699**, 25 (2011)

756. "Study of Z boson production in PbPb collisions at nucleon-nucleon centre of mass energy = 2.76 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. Lett. 106, 212301 (2011)

757. "Search for a Heavy Bottom-like Quark in pp Collisions at  $\sqrt{s} = 7$  TeV" S. Chatrchyan *et al.* [CMS Collaboration].

Phys. Lett. B **701**, 204 (2011)

758. "Search for New Heavy Particles Decaying to  $ZZ \to \ell\ell\ell\ell$ ,  $\ell\ell jj$  in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 83, 112008 (2011)

759. "Strange Particle Production in pp Collisions at sqrt(s) = 0.9 and 7 TeV" V. Khachatryan *et al.* [CMS Collaboration].

JHEP **1105**, 064 (2011)

760. "Measurement of B anti-B Angular Correlations based on Secondary Vertex Reconstruction at sqrt(s)=7 TeV"

V. Khachatryan et al. [CMS Collaboration].

JHEP **1103**, 136 (2011)

761. "Measurement of Dijet Angular Distributions and Search for Quark Compositeness in pp Collisions at sqrts = 7 TeV"

V. Khachatryan et al. [CMS Collaboration].

Phys. Rev. Lett. **106**, 201804 (2011)

762. "Observation and studies of jet quenching in PbPb collisions at nucleon-nucleon center-of-mass energy = 2.76 TeV"

S. Chatrchyan et al. [CMS Collaboration].

Phys. Rev. C 84, 024906 (2011)

763. "Observation of  $B^0_s \to J/\psi K^{*0}(892)$  and  $B^0_s \to J/\psi K^0_S$  Decays"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 83, 052012 (2011)

764. "Search for the Higgs boson in the all-hadronic final state using the CDF II detector"

T. Aaltonen et al. [The CDF Collaboration].

Phys. Rev. D 84, 052010 (2011)

765. "First Measurement of Hadronic Event Shapes in pp Collisions at sqrt(s)=7 TeV"

V. Khachatryan et al. [CMS Collaboration].

Phys. Lett. B **699**, 48 (2011)

766. "Search for heavy bottom-like quarks decaying to an electron or muon and jets in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV"

T. Aaltonen et al. [The CDF Collaboration].

Phys. Rev. Lett. **106**, 141803 (2011)

767. "Dijet Azimuthal Decorrelations in pp Collisions at  $\sqrt{s} = 7$  TeV"

V. Khachatryan et al. [CMS Collaboration].

Phys. Rev. Lett. 106, 122003 (2011)

768. "Measurement of the Top Quark Mass in the Lepton+Jets Channel Using the Lepton Transverse Momentum"

T. Aaltonen et al. [The CDF Collaboration].

Phys. Lett. B **698**, 371 (2011)

769. "Search for High Mass Resonances Decaying to Muon Pairs in  $\sqrt{s}=1.96$  TeV  $p\bar{p}$  Collisions"

T. Aaltonen et al. [The CDF Collaboration].

Phys. Rev. Lett. **106**, 121801 (2011)

770. "Inclusive b-hadron production cross section with muons in pp collisions at sqrt(s) = 7 TeV"

V. Khachatryan et al. [CMS Collaboration].

JHEP **1103**, 090 (2011)

771. "Measurement of Bose-Einstein Correlations in pp Collisions at sqrt(s)=0.9 and 7 TeV"

V. Khachatryan et al. [CMS Collaboration].

JHEP **1105**, 029 (2011)

772. "Search for Supersymmetry in pp Collisions at 7 TeV in Events with Jets and Missing Transverse Energy"

V. Khachatryan et al. [CMS Collaboration].

Phys. Lett. B **698**, 196 (2011)

773. "Search for Heavy Stable Charged Particles in pp collisions at sqrt(s)=7 TeV" V. Khachatryan et al. [CMS Collaboration].

JHEP 1103, 024 (2011)

774. "Measurement of the Forward-Backward Asymmetry in the  $B \to K^{(*)} \mu^+ \mu^-$  Decay and First Observation of the  $B_s^0 \to \phi \mu^+ \mu^-$  Decay"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **106**, 161801 (2011)

775. "Measurement of the  $B^+$  Production Cross Section in pp Collisions at  $\sqrt{s} = 7$  TeV"

V. Khachatryan et al. [CMS Collaboration].

Phys. Rev. Lett. **106**, 112001 (2011)

776. "Evidence for a Mass Dependent Forward-Backward Asymmetry in Top Quark Pair Production"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 83, 112003 (2011)

777. "Search for a heavy gauge boson W' in the final state with an electron and large missing transverse energy in pp collisions at sqrt(s) = 7 TeV"

V. Khachatryan et al. [CMS Collaboration].

Phys. Lett. B 698, 21 (2011)

778. "Measurement of the Inclusive Upsilon production cross section in pp collisions at sqrt(s)=7 TeV"

V. Khachatryan et al. [CMS Collaboration].

Phys. Rev. D 83, 112004 (2011)

779. "Search for a New Heavy Gauge Boson W' with Electron + missing ET Event Signature in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 83, 031102 (2011)

780. "Search for Pair Production of First-Generation Scalar Leptoquarks in pp Collisions at sqrt(s) = 7 TeV"

V. Khachatryan et al. [CMS Collaboration].

Phys. Rev. Lett. 106, 201802 (2011)

781. "Search for Pair Production of Second-Generation Scalar Leptoquarks in pp Collisions at sqrt(s) = 7 TeV"

V. Khachatryan et al. [CMS Collaboration].

Phys. Rev. Lett. **106**, 201803 (2011)

782. "Search for Microscopic Black Hole Signatures at the Large Hadron Collider" V. Khachatryan *et al.* [CMS Collaboration]. Phys. Lett. B **697**, 434 (2011)

783. "Measurement of  $t\bar{t}$  Spin Correlation in  $p\bar{p}$  Collisions Using the CDF II Detector at the Tevatron"

T. Aaltonen et~al. [CDF Collaboration].

Phys. Rev. D 83, 031104 (2011)

784. "Measurement of b hadron lifetimes in exclusive decays containing a J/psi in p-pbar collisions at sqrt(s)=1.96TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **106**, 121804 (2011)

785. "Measurements of Inclusive W and Z Cross Sections in pp Collisions at sqrt(s)=7 TeV"

V. Khachatryan  $et\ al.$  [CMS Collaboration].

JHEP **1101**, 080 (2011)

786. "Search for Randall-Sundrum Gravitons in the Diphoton Channel at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 83, 011102 (2011)

787. "Measurement of the Isolated Prompt Photon Production Cross Section in pp Collisions at  $\sqrt{s} = 7$  TeV"

V. Khachatryan et al. [CMS Collaboration].

Phys. Rev. Lett. **106**, 082001 (2011)

788. "Charged particle multiplicities in pp interactions at sqrt(s) = 0.9, 2.36, and 7 TeV"

V. Khachatryan  $et\ al.$  [CMS Collaboration].

JHEP **1101**, 079 (2011)

789. "Search for Stopped Gluinos in pp collisions at sqrt s = 7 TeV"

V. Khachatryan et al. [CMS Collaboration].

Phys. Rev. Lett. 106, 011801 (2011)

790. "Prompt and non-prompt J/psi production in pp collisions at sqrt(s) = 7 TeV" V. Khachatryan *et al.* [CMS Collaboration]. Eur. Phys. J. C **71**, 1575 (2011)

791. "First Measurement of the Cross Section for Top-Quark Pair Production in Proton-Proton Collisions at sqrt(s)=7 TeV"

V. Khachatryan *et al.* [CMS Collaboration].

Phys. Lett. B **695**, 424 (2011)

792. "Top Quark Mass Measurement in the Lepton + Jets Channel Using a Matrix Element Method and *in situ* Jet Energy Calibration"

abert Than

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 105, 252001 (2010)

793. "Search for Quark Compositeness with the Dijet Centrality Ratio in pp Collisions at sqrt(s)=7 TeV"

V. Khachatryan et al. [CMS Collaboration].

Phys. Rev. Lett. **105**, 262001 (2010)

794. "Search for Dijet Resonances in 7 TeV pp Collisions at CMS"

V. Khachatrvan et al. [CMS Collaboration].

Phys. Rev. Lett. 105, 211801 (2010)

795. "Observation of Long-Range Near-Side Angular Correlations in Proton-Proton Collisions at the LHC"

V. Khachatryan et al. [CMS Collaboration].

JHEP **1009**, 091 (2010)

796. "Improved Search for a Higgs Boson Produced in Association with Z->l+l- in proton antiproton Collisions at sqrt(s) = 1.96 TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 105, 251802 (2010)

797. "Search for the supersymmetric partner of the top quark in ppbar collisions at sqrt(s) = 1.96 TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 82, 092001 (2010)

798. "Updated Search for the Flavor-Changing Neutral-Current Decay  $D^0 \to \mu^+ \mu^-$ "
T. Aaltonen *et al.* [CDF Collaboration].

Phys. Rev. D 82, 091105 (2010)

799. "Measurement of the WW+WZ Production Cross Section Using a Matrix Element Technique in Lepton + Jets Events"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 82, 112001 (2010)

800. "Direct Top-Quark Width Measurement CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 105, 232003 (2010)

801. "Diffractive W and Z Production at the Fermilab Tevatron"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 82, 112004 (2010)

802. "Measurement of the  $t\bar{t}$  Production Cross Section with an in situ Calibration of b-jet Identification Efficiency"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 83, 071102 (2011)

803. "CMS Tracking Performance Results from early LHC Operation"

V. Khachatryan et al. [CMS Collaboration].

Eur. Phys. J. C **70**, 1165 (2010)

804. "Exclusion of an Exotic Top Quark with -4/3 Electric Charge Using Soft Lepton Tagging"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **105**, 101801 (2010)

805. "First Measurement of the Underlying Event Activity at the LHC with  $\sqrt{s}=0.9$  TeV"

V. Khachatryan et al. [CMS Collaboration].

Eur. Phys. J. C **70**, 555 (2010)

806. "Measurement of the charge ratio of atmospheric muons with the CMS detector" V. Khachatryan *et al.* [CMS Collaboration].

Phys. Lett. B **692**, 83 (2010)

807. "Measurement of  $d\sigma/dy$  of Drell-Yan  $e^+e^-$  pairs in the Z Mass Region from  $p\bar{p}$  Collisions at  $\sqrt{s}=1.96$  TeV"

T. A. Aaltonen et al. [CDF Collaboration].

Phys. Lett. B **692**, 232 (2010)

808. "Combined Tevatron upper limit on  $gg \to H \to W^+W^-$  and constraints on the Higgs boson mass in fourth-generation fermion models"

T. Aaltonen et al. [CDF and D0 Collaboration].

Phys. Rev. D 82, 011102 (2010)

809. "Measurement of Bose-Einstein correlations with first CMS data"

V. Khachatryan et al. [CMS Collaboration].

Phys. Rev. Lett. **105**, 032001 (2010)

810. "Transverse-momentum and pseudorapidity distributions of charged hadrons in pp collisions at sqrt(s) = 7 TeV"

V. Khachatryan et al. [CMS Collaboration].

Phys. Rev. Lett. **105**, 022002 (2010)

811. "Search for the Production of Scalar Bottom Quarks in  $p\bar{p}$  collisions at  $\sqrt{s}=$  1.96 TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 105, 081802 (2010)

812. "Search for WW and WZ resonances decaying to electron, missing  $E_T$ , and two jets in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [The CDF Collaboration].

Phys. Rev. Lett. **104**, 241801 (2010)

813. "Measurement of the  $B^-$  lifetime using a simulation free approach for trigger bias correction"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 83, 032008 (2011)

814. "Search for R-parity Violating Decays of  $\tau$  sneutrinos to  $e\mu$ ,  $\mu\tau$ , and  $e\tau$  Pairs in ppbar Collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [The CDF Collaboration].

Phys. Rev. Lett. **105**, 191801 (2010)

815. "First Measurement of the Ratio  $\sigma_(t\bar{t})/\sigma_(Z/\gamma**\to\ell\ell)$  and Precise Extraction of the  $t\bar{t}$  Cross Section"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **105**, 012001 (2010)

816. "Observation of Single Top Quark Production and Measurement of |Vtb| with CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 82, 112005 (2010)

817. "Measurement of Z gamma Production in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen  $et\ al.$  [CDF Collaboration].

Phys. Rev. D 82, 031103 (2010)

818. "Studying the Underlying Event in Drell-Yan and High Transverse Momentum Jet Production at the Tevatron"

T. Aaltonen et al. [The CDF Collaboration].

Phys. Rev. D 82, 034001 (2010)

819. "Measurement of W-Boson Polarization in Top-quark Decay in ppbar Collisions at sqrt(s) = 1.96 TeV"

T. Aaltonen et al. [The CDF Collaboration].

Phys. Rev. Lett. 105, 042002 (2010)

820. "Measurement of the  $t\bar{t}$  Production Cross Section in  $p\bar{p}$  Collisions at sqrt(s)=1.96 TeV using Soft Electron b-Tagging"

abert Than

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 81, 092002 (2010)

821. "Measurement of the Top Pair Production Cross Section in the Dilepton Decay Channel in ppbar Collisions at sqrt s=1.96 TeV"

T. Aaltonen et al. [The CDF Collaboration].

Phys. Rev. D 82, 052002 (2010)

822. "Transverse momentum and pseudorapidity distributions of charged hadrons in pp collisions at  $\sqrt(s) = 0.9$  and 2.36 TeV"

V. Khachatryan et al. [CMS Collaboration].

JHEP **1002**, 041 (2010)

823. "Measurement of the Top Quark Mass and  $p\bar{p} \to t\bar{t}$  Cross Section in the All-Hadronic Mode with the CDFII Detector"

T. Aaltonen et al. [The CDF Collaboration].

Phys. Rev. D 81, 052011 (2010)

824. "Combination of Tevatron searches for the standard model Higgs boson in the W+W- decay mode"

T. Aaltonen et al. [CDF and D0 Collaboration].

Phys. Rev. Lett. 104, 061802 (2010)

825. "Inclusive Search for Standard Model Higgs Boson Production in the WW Decay Channel using the CDF II Detector"

T. Aaltonen et al. [The CDF Collaboration].

Phys. Rev. Lett. **104**, 061803 (2010)

826. "Search for single top quark production in pbar p collisions at sqrts=1.96 TeV in the missing transverse energy plus jets topology"

T. Aaltonen et al. [The CDF Collaboration].

Phys. Rev. D 81, 072003 (2010)

827. "Search for New Physics with a Dijet plus Missing Transverse Energy Signature in  $p\bar{p}$  Collisions at  $\sqrt{s}=1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **105**, 131801 (2010)

828. "Measurement of the W+ W- Production Cross Section and Search for Anomalous WW gamma and WWZ Couplings in p p-bar Collisions at  $s^{**}(1/2) = 1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **104**, 201801 (2010)

829. "Measurement of the Lambda0(b) Lifetime in Lambda0(b)  $\longrightarrow$  Lambda+(c) pi-Decays in p p-bar Collisions at s\*\*(1/2) = 1.96-TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 104, 102002 (2010)

830. "A Study of the associated production of photons and b-quark jets in p p-bar collisions at  $s^{**}(1/2) = 1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 81, 052006 (2010)

831. "Search for Technicolor Particles Produced in Association with a W Boson at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **104**, 111802 (2010)

832. "Search for Pair Production of Supersymmetric Top Quarks in Dilepton Events from p anti-p Collisions at  $S^{**}(1/2) = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **104**, 251801 (2010)

833. "Search for New Bottomlike Quark Pair Decays Q Q-bar —> (t W-+) (t-bar W+-) in Same-Charge Dilepton Events"

abert Then

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 104, 091801 (2010)

834. "Commissioning and Performance of the CMS Pixel Tracker with Cosmic Ray Muons"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03007 (2010)

835. "Performance of the CMS Level-1 Trigger during Commissioning with Cosmic Ray Muons"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03002 (2010)

836. "Measurement of the Muon Stopping Power in Lead Tungstate"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, P03007 (2010)

837. "Commissioning and Performance of the CMS Silicon Strip Tracker with Cosmic Ray Muons"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03008 (2010)

838. "Performance of CMS Muon Reconstruction in Cosmic-Ray Events"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03022 (2010)

839. "Performance of the CMS Cathode Strip Chambers with Cosmic Rays"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03018 (2010)

840. "Performance of the CMS Hadron Calorimeter with Cosmic Ray Muons and LHC Beam Data"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03012 (2010)

841. "Fine Synchronization of the CMS Muon Drift-Tube Local Trigger using Cosmic Rays"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03004 (2010)

842. "Calibration of the CMS Drift Tube Chambers and Measurement of the Drift Velocity with Cosmic Rays"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03016 (2010)

843. "Performance of the CMS Drift-Tube Local Trigger with Cosmic Rays"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03003 (2010)

844. "Commissioning of the CMS High-Level Trigger with Cosmic Rays"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03005 (2010)

845. "Identification and Filtering of Uncharacteristic Noise in the CMS Hadron Calorimeter"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03014 (2010)

846. "Performance of CMS Hadron Calorimeter Timing and Synchronization using Test Beam, Cosmic Ray, and LHC Beam Data"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03013 (2010)

847. "Performance of the CMS Drift Tube Chambers with Cosmic Rays"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03015 (2010)

Nobert Han

848. "Commissioning of the CMS Experiment and the Cosmic Run at Four Tesla" S. Chatrchyan *et al.* [CMS Collaboration].

JINST 5, T03001 (2010)

849. "CMS Data Processing Workflows during an Extended Cosmic Ray Run" S. Chatrchyan *et al.* [CMS Collaboration]. JINST **5**, T03006 (2010)

850. "Aligning the CMS Muon Chambers with the Muon Alignment System during an Extended Cosmic Ray Run"

S. Chatrchyan *et al.* [CMS Collaboration]. JINST **5**, T03019 (2010)

851. "Measurement of the WW+WZ Production Cross Section Using the Lepton+Jets Final State at CDF II"

T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. Lett. **104**, 101801 (2010)

852. "Performance Study of the CMS Barrel Resistive Plate Chambers with Cosmic Rays"

S. Chatrchyan *et al.* [CMS Collaboration]. JINST **5**, T03017 (2010)

853. "Time Reconstruction and Performance of the CMS Electromagnetic Calorimeter"

S. Chatrchyan *et al.* [CMS Collaboration]. JINST **5**, T03011 (2010)

854. "Alignment of the CMS Muon System with Cosmic-Ray and Beam-Halo Muons" S. Chatrchyan *et al.* [CMS Collaboration].

JINST 5, T03020 (2010)

855. "A Search for the Higgs Boson Using Neural Networks in Events with Missing Energy and b-quark Jets in p anti-p Collisions at s\*\*(1/2) = 1.96-TeV".

T. Aaltonen *et al.* [CDF Collaboration].
Phys. Rev. Lett. **104**, 141801 (2010)

856. "Search for New Color-Octet Vector Particle Decaying to t anti-t in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV"

T. Aaltonen *et al.* [CDF Collaboration]. Phys. Lett. B **691**, 183 (2010)

857. "Top Quark Mass Measurement using mT2 in the Dilepton Channel at CDF" T. Aaltonen *et al.* [CDF Collaboration]. Phys. Rev. D **81**, 031102 (2010)

858. "Measurements of branching fraction ratios and CP asymmetries in B+- —> D(CP) K+- decays in hadron collisions"

T. Aaltonen  $et\ al.$  [CDF Collaboration].

Phys. Rev. D 81, 031105 (2010)

859. "Precise Mapping of the Magnetic Field in the CMS Barrel Yoke using Cosmic Rays"

S. Chatrchyan *et al.* [CMS Collaboration]. JINST **5**, T03021 (2010)

860. "Search for Anomalous Production of Events with Two Photons and Additional Energetic Objects at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 82, 052005 (2010)

861. "Measurement of the Inclusive Isolated Prompt Photon Cross Section in p anti-p Collisions at s\*\*(1/2) = 1.96-TeV using the CDF Detector"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **80**, 111106 (2009)

Robert Than

862. "Search for Supersymmetry with Gauge-Mediated Breaking in Diphoton Events with Missing Transverse Energy at CDF II"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **104**, 011801 (2010)

863. "Performance and Operation of the CMS Electromagnetic Calorimeter" S. Chatrchyan *et al.* [CMS Collaboration].

JINST 5, T03010 (2010)

864. "Alignment of the CMS Silicon Tracker during Commissioning with Cosmic Rays"

S. Chatrchyan et al. [CMS Collaboration].

JINST 5, T03009 (2010)

865. "Measurements of the top-quark mass using charged particle tracking"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 81, 032002 (2010)

866. "First Measurement of the b-jet Cross Section in Events with a W Boson in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 104, 131801 (2010)

867. "A Search for the Higgs Boson Produced in Association with Z —> l+ l- Using the Matrix Element Method at CDF II"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 80, 071101 (2009)

868. "Flavor Physics in the Quark Sector"

M. Antonelli, D. M. Asner, D. A. Bauer, T. G. Becher, M. Beneke, A. J. Bevan, M. Blanke and C. Bloise *et al.*.

Phys. Rept. **494**, 197 (2010)

869. "Search for charged Higgs bosons in decays of top quarks in p anti-p collisions at  $s^{**}(1/2) = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **103**, 101803 (2009)

870. "A Search for the Associated Production of the Standard-Model Higgs Boson in the All-Hadronic Channel"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 103, 221801 (2009)

871. "Search for a Higgs Boson produced in association a W Boson in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 103, 101802 (2009)

872. "Measurement of the Top Quark Mass Using the Invariant Mass of Lepton Pairs in Soft Muon b-tagged Events"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 80, 051104 (2009)

873. "Precision Measurement of the X(3872) Mass in J/psi pi+ pi- Decays"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 103, 152001 (2009)

874. "Search for Higgs bosons predicted in two-Higgs-doublet models via decays to tau lepton pairs in 1.96-TeV p anti-p collisions"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 103, 201801 (2009)

875. "Searching the Inclusive Lepton + Photon + Missing E(T) + b-quark Signature for Radiative Top Quark Decay and Non-Standard-Model Processes"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 80, 011102 (2009)

876. "First Observation of Vector Boson Pairs in a Hadronic Final State at the Tevatron Collider"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 103, 091803 (2009)

877. "Search for Standard Model Higgs Boson Production in Association with a W Boson using a Neural Network Discriminant at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **80**, 012002 (2009)

878. "Observation of the Omega(b)- Baryon and Measurement of the Properties of the Xi(b)- and Omega(b)- Baryons"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 80, 072003 (2009)

879. "Production of psi(2S) Mesons in p anti-p Collisions at 1.96-TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 80, 031103 (2009)

880. "Search for a Fermiophobic Higgs Boson Decaying into Diphotons in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 103, 061803 (2009)

881. "Search for the Neutral Current Top Quark Decay t —> Zc Using Ratio of Z-Boson + 4 Jets to W-Boson + 4 Jets Production"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 80, 052001 (2009)

882. "Search for Anomalous Production of Events with a Photon, Jet, b-quark Jet, and Missing Transverse Energy"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 80, 052003 (2009)

883. "Measurement of Particle Production and Inclusive Differential Cross Sections in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **79**, 112005 (2009), [Erratum-ibid. D **82**, 119903 (2010)]

884. "A Measurement of the t anti-t Cross Section in p anti-p Collisions at  $s^{**}(1/2)$ = 1.96-TeV using Dilepton Events with a Lepton plus Track Selection"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **79**, 112007 (2009)

885. "First Measurement of the t anti-t Differential Cross Section d sigma/dM(t anti-t) in p anti-p Collisions at  $s^{**}(1/2)=1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 102, 222003 (2009)

886. "Search for Gluino-Mediated Sbottom Production in p anti-p Collisions at  $s^{**}(1/2)$ = 1.96-TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 102, 221801 (2009)

887. "Measurement of the b-Hadron Production Cross Section Using Decays to MU-d0 X Final States in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **79**, 092003 (2009)

888. "Evidence for a Narrow Near-Threshold Structure in the  $J/\psi\phi$  Mass Spectrum in  $B^+ \to J/\psi\phi K^+$  Decays"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **102**, 242002 (2009)

889. "Search for narrow resonances lighter than Upsilon mesons"

T. Aaltonen et al. [CDF Collaboration].

Eur. Phys. J. C **62**, 319 (2009)

890. "First Observation of Electroweak Single Top Quark Production"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 103, 092002 (2009)

891. "Search for WW and WZ production in lepton plus jets final state at CDF" T. Aaltonen *et al.* [CDF Collaboration].

Phys. Rev. D 79, 112011 (2009)

892. "Search for the Production of Narrow t anti-b Resonances in 1.9 fb-1 of p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 103, 041801 (2009)

893. "Search for exclusive Z boson production and observation of high mass  $p\bar{p} \to \gamma\gamma \to p + \ell\ell + \bar{p}$  events in  $p\bar{p}$  collisions at  $\sqrt{s} =$  1.96 TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **102**, 222002 (2009)

894. "Observation of exclusive charmonium production and gamma  $\longrightarrow$  mu+muin p anti-p collisions at s\*\*(1/2) = 1.96-TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 102, 242001 (2009)

895. "Search for Long-Lived Massive Charged Particles in 1.96 TeV  $\bar{p}p$  Collisions"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 103, 021802 (2009)

896. "Measurement of the  $t\bar{t}$  Production Cross Section in 2 fb<sup>-1</sup> of  $p\bar{p}$  Collisions at  $\sqrt{s}=1.96$  TeV Using Lepton Plus Jets Events with Soft Muon b-Tagging"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 79, 052007 (2009)

897. "Search for the Decays B0(s) —> e+ mu- and B0(s) —> e+ e- in CDF Run II"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **102**, 201801 (2009)

898. "Measurement of the top quark mass at CDF using the 'neutrino  $\phi$  weighting' template method on a lepton plus isolated track sample"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **79**, 072005 (2009)

899. "Direct Measurement of the W Production Charge Asymmetry in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 102, 181801 (2009)

900. "Top Quark Mass Measurement in the Lepton plus Jets Channel Using a Modified Matrix Element Method"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **79**, 072001 (2009)

901. "Measurement of Cross Sections for b Jet Production in Events with a Z Boson in  $p^-$  anti-p Collisions at  $\sqrt{s} = 1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 79, 052008 (2009)

902. "Observation of New Charmless Decays of Bottom Hadrons"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 103, 031801 (2009)

903. "Search for new particles decaying into dijets in proton-antiproton collisions at  $s^{**}(1/2) = 1.96$ -TeV"

abert Than

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 79, 112002 (2009)

904. "Search for top-quark production via flavor-changing neutral currents in W+1 jet events at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 102, 151801 (2009)

905. "Measurement of the  $k_T$  Distribution of Particles in Jets Produced in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 102, 232002 (2009)

906. "Inclusive Search for Squark and Gluino Production in  $p\bar{p}$  Collisions at  $\sqrt{s}=$  1.96-TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **102**, 121801 (2009)

907. "Top Quark Mass Measurement in the  $t\bar{t}$  All Hadronic Channel using a Matrix Element Technique in  $p\bar{p}$  Collisions at  $\sqrt{s}=$  1.96-TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **79**, 072010 (2009)

908. "Measurement of W-Boson Helicity Fractions in Top-Quark Decays Using cos theta\*"

T. Aaltonen et al. [CDF Collaboration].

Phys. Lett. B 674, 160 (2009)

909. "A Search for high-mass resonances decaying to dimuons at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. **102**, 091805 (2009)

910. "Search for new physics in the mu mu + e/ mu + E(T) channel with a low-p(T) lepton threshold at the Collider Detector at Fermilab"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **79**, 052004 (2009)

911. "First Measurement of the Ratio of Branching Fractions  $B(\Lambda_b^0 \to \Lambda_c^+ \mu^- \bar{\nu}_\mu/B(Lambda_b^0 \to \Lambda_c^+ \pi^-)$ "

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **79**, 032001 (2009)

912. "Search for High-Mass  $e^+$  e- Resonances in  $p\bar{p}$  Collisions at  $\sqrt{s}=$  1.96-TeV" T. Aaltonen *et al.* [CDF Collaboration].

Phys. Rev. Lett. **102**, 031801 (2009)

913. "Measurement of Resonance Parameters of Orbitally Excited Narrow  $B^0$  Mesons" T. Aaltonen *et al.* [CDF Collaboration].

Phys. Rev. Lett. 102, 102003 (2009)

914. "Search for Maximal Flavor Violating Scalars in Same-Charge Lepton Pairs in  $p\bar{p}$  Collisions at  $\sqrt{s}=$  1.96-TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 102, 041801 (2009)

915. "First simultaneous measurement of the top quark mass in the lepton + jets and dilepton channels at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **79**, 092005 (2009)

916. "Search for a Higgs Boson Decaying to Two W Bosons at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 102, 021802 (2009)

917. "Global Search for New Physics with 2.0 fb\*\*(-1) at CDF"

T. Aaltonen et al. [CDF Collaboration].

Nobert Han

Phys. Rev. D **79**, 011101 (2009)

918. "First observation of  $\bar{B}_s^0 \to D_s^{\pm} K^{\mp}$  and measurement of the ratio of branching fractions  $\mathbf{B}(\bar{B}_s^0 \to D_s^{\pm} K^{\mp} / \mathbf{B}(\bar{B}_s^0 \to D_s^{+} \pi^{-})$ "

T. Aaltonen *et al.* [CDF Collaboration].

Phys. Rev. Lett. **103**, 191802 (2009)

919. "First Direct Bound on the Total Width of the Top Quark in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 102, 042001 (2009)

920. "Measurement of the top quark mass with dilepton events selected using neuroevolution at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. Lett. 102, 152001 (2009)

921. "Measurement of the fraction of  $t\bar{t}$  production via gluon-gluon fusion in  $p\bar{p}$  collisions at  $\sqrt{s}=1.96$ -TeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 79, 031101 (2009)

922. "Measurement of the Inclusive Jet Cross Section at the Fermilab Tevatron p anti-p Collider Using a Cone-Based Jet Algorithm"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D 78, 052006 (2008), [Erratum-ibid. D 79, 119902 (2009)]

923. "Search for the Rare Decays  $B^+ \to \mu^+ \mu^- K^+, B^0 \to \mu^+ \mu^- K^{*0}(892), \text{ and } B_s^0 \to \mu^+ \mu^- \phi$  at CDF"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **79**, 011104 (2009)

924. "Search for Hadronic Decays of W and Z Bosons in Photon Events in  $p\bar{p}$  Collisions at  $\sqrt{s}=$  1.96-GeV"

T. Aaltonen et al. [CDF Collaboration].

Phys. Rev. D **80**, 052011 (2009)

- 925. "Measurement of the Inclusive Isolated Prompt Photon Cross Section in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV using the CDF Detector", CDF Collaboration, Phys.Rev.D80:111106,2009,. [arXiv:0910.3623]
- 926. "A Search for the Associated Production of the Standard-Model Higgs Boson in the All-Hadronic Channel", CDF Collaboration, Phys.Rev.Lett.103:221801,2009,. [arXiv:0907.0810]
- 927. "Search for charged Higgs bosons in decays of top quarks in p anti-p collisions at s\*\*(1/2) = 1.96 TeV", CDF Collaboration, Phys.Rev.Lett.103:101803,2009,. [arXiv:0907.1269]
- 928. "Searching the Inclusive Lepton + Photon + Missing E(T) + b-quark Signature for Radiative Top Quark Decay and Non-Standard-Model Processes", CDF Collaboration, Phys.Rev.D80:011102,2009,. [arXiv:0906.0518]
- 929. "Search for Higgs bosons predicted in two-Higgs-doublet models via decays to tau lepton pairs in 1.96-TeV p anti-p collisions", CDF Collaboration, Phys.Rev.Lett.103:201801,2009,. [arXiv:0906.1014]
- 930. "Precision Measurement of the X(3872) Mass in J/psi pi+ pi- Decays", CDF Collaboration, Phys.Rev.Lett.103:152001,2009,. [arXiv:0906.5218]
- 931. "Measurement of the Top Quark Mass Using the Invariant Mass of Lepton Pairs in Soft Muon b-tagged Events", CDF Collaboration, Phys.Rev.D80:051104,2009, [arXiv:0906.5371]
- 932. "Search for a Higgs Boson produced in association a W Boson in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", CDF Collaboration, Phys.Rev.Lett.103:101802,2009,. [arXiv:0906.5613]
- 933. "Search for Anomalous Production of Events with a Photon, Jet, b-quark Jet, and Missing Transverse Energy", CDF Collaboration, Phys.Rev.D80:052003,2009, [arXiv:0905.0231]

Robert Than

- 934. "Search for the Neutral Current Top Quark Decay t ---> Zc Using Ratio of Z-Boson + 4 Jets to W-Boson + 4 Jets Production", CDF Collaboration, Phys.Rev.D80:052001,2009,. [arXiv:0905.0277]
- 935. "Search for a Fermiophobic Higgs Boson Decaying into Diphotons in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", CDF Collaboration, Phys.Rev.Lett.103:061803,2009,. [arXiv:0905.0413]
- 936. "Production of psi(2S) Mesons in p anti-p Collisions at 1.96-TeV", CDF Collaboration, Phys.Rev.D80:031103,2009,. [arXiv:0905.1982]
- 937. "Observation of the Omega(b)- Baryon and Measurement of the Properties of the Xi(b)- and Omega(b)- Baryons", CDF Collaboration, Phys.Rev.D80:072003,2009,. [arXiv:0905.3123]
- 938. "Search for Standard Model Higgs Boson Production in Association with a W Boson using a Neural Network Discriminant at CDF", CDF Collaboration, Phys.Rev.D80:012002,2009,. [arXiv:0905.3155]
- 939. "First Observation of Vector Boson Pairs in a Hadronic Final State at the Tevatron Collider", CDF Collaboration, Phys.Rev.Lett.103:091803,2009, [arXiv:0905.4714]
- 940. "Measurement of Particle Production and Inclusive Differential Cross Sections in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", CDF Collaboration, Phys.Rev.D79:112005,2009,. [arXiv:0904.1098]
- 941. "Search for WW and WZ production in lepton plus jets final state at CDF", CDF Collaboration, Phys.Rev.D79:112011,2009,. [arXiv:0903.0814]
- 942. "First Observation of Electroweak Single Top Quark Production", CDF Collaboration, Phys.Rev.Lett.103:092002,2009,. [arXiv:0903.0885]
- 943. "Search for narrow resonances lighter than Upsilon mesons", CDF Collaboration, Eur.Phys.J.C62:319-326,2009,. [arXiv:0903.2060]
- 944. "Evidence for a Narrow Near-Threshold Structure in the  $J/\psi\phi$  Mass Spectrum in  $B^+ \to J/\psi\phi K^+$  Decays", CDF Collaboration, Phys.Rev.Lett.102:242002,2009, [arXiv:0903.2229]
- 945. "Measurement of the b-Hadron Production Cross Section Using Decays to MU-D0 X Final States in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", CDF Collaboration, Phys.Rev.D79:092003,2009,. [arXiv:0903.2403]
- 946. "Search for Gluino-Mediated Sbottom Production in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", CDF Collaboration, Phys.Rev.Lett.102:221801,2009,. [arXiv:0903.2618]
- 947. "First Measurement of the t anti-t Differential Cross Section d sigma/dM(t anti-t) in p anti-p Collisions at  $s^{**}(1/2)=1.96$ -TeV", CDF Collaboration, Phys.Rev.Lett.102:222003,2009,. [arXiv:0903.2850]
- 948. "A Measurement of the t anti-t Cross Section in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV using Dilepton Events with a Lepton plus Track Selection", CDF Collaboration, Phys.Rev.D79:112007,2009, [arXiv:0903.5263]
- 949. "Search for Long-Lived Massive Charged Particles in 1.96-TeV p anti-p Collisions", CDF Collaboration, Phys.Rev.Lett.103:021802,2009,. [arXiv:0902.1266]
- 950. "Observation of exclusive charmonium production and gamma gamma ---> mu+mu- in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", CDF Collaboration, Phys.Rev.Lett.102:242001,2009,. [arXiv:0902.1271]
- 951. "Search for exclusive Z boson production and observation of high mass p anti-p  $\rightarrow$  gamma gamma anti-p  $\rightarrow$  pl+ l- anti-p events in p anti-p collisions at s\*\*(1/2) = 1.96-TeV", CDF Collaboration, Phys.Rev.Lett.102:222002,2009,. [arXiv:0902.2816]
- 952. "Search for the Production of Narrow t anti-b Resonances in 1.9 fb-1 of p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", CDF Collaboration, Phys.Rev.Lett.103:041801,2009, [arXiv:0902.3276]
- 953. "Direct Measurement of the W Production Charge Asymmetry in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", CDF Collaboration, Phys.Rev.Lett.102:181801,2009,. [arXiv:0901.2169]
- 954. "Measurement of the top quark mass at CDF using the `neutrino phi weighting' template method on a lepton plus isolated track sample", CDF Collaboration, Phys.Rev.D79:072005,2009,. [arXiv:0901.3773]

- 955. "Search for the Decays  $B^0(s) \to e^+\mu^-$  and  $B^0(s) \to e^+e^-$  in CDF Run II", CDF Collaboration, Phys.Rev.Lett.102:201801,2009,. [arXiv:0901.3803]
- 956. "Measurement of the t anti-t Production Cross Section in 2 fb\*\*-1 of p anti-p Collisions at s\*\*(1/2) =1.96-TeV Using Lepton Plus Jets Events with Soft Muon b-Tagging", CDF Collaboration, Phys.Rev.D79:052007,2009, [arXiv:0901.4142]
- 957. "Search for charged Higgs bosons in decays of top quarks in p anti-p collisions at s\*\*(1/2) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 103, 101803 (2009).
- 958. "Searching the Inclusive Lepton + Photon + Missing E(T) + b-quark Signature for Radiative Top Quark Decay and Non-Standard-Model Processes", R.F. Harr with CDF Collaboration, Phys. Rev. D 80, 011102 (2009).
- 959. "Search for a Higgs Boson in W H --> l nu b anti-b in p anti-p Collisions at  $s^{**}(1/2) = 1.96$  TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 103, 101802 (2009).
- 960. "Search for the Neutral Current Top Quark Decay  $t \to Zc$  Using Ratio of Z-Boson + 4 Jets to W-Boson + 4 Jets Production", R.F. Harr with CDF Collaboration, Phys. Rev. D 80, 052001 (2009).
  - Co-authored with Shalhout Shalhout. I played a significant role in preparing this paper, contributing the title as well as numerous editorial comments.
- 961. "Search for a Fermiophobic Higgs Boson Decaying into Diphotons in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 103, 061803 (2009).
- 962. "Production of psi(2S) Mesons in p anti-p Collisions at 1.96-TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 80, 031103 (2009).
- 963. "Search for Standard Model Higgs Boson Production in Association with a W Boson using a Neural Network Discriminant at CDF", R.F. Harr with CDF Collaboration, Phys. Rev. D 80, 012002 (2009).
- 964. "First Observation of Vector Boson Pairs in a Hadronic Final State at the Tevatron Collider", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 103, 091803 (2009).
- 965. "Measurement of Particle Production and Inclusive Differential Cross Sections in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 79, 112005 (2009).
- 966. "Search for WW and WZ production in lepton plus jets final state at CDF", R.F. Harr with CDF Collaboration, Phys. Rev. D 79, 112011 (2009).
- 967. "First Observation of Electroweak Single Top Quark Production", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 103, 092002 (2009).
- 968. "Search for narrow resonances lighter than Upsilon mesons", R.F. Harr with CDF Collaboration, Eur. Phys. J. C 62, 319-326 (2009).
- 969. "Search for Gluino-Mediated Sbottom Production in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 221801 (2009).
- 970. "First Measurement of the t anti-t Differential Cross Section d sigma/dM(t anti-t) in p anti-p Collisions at s\*\*(1/2)=1.96-TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 2220003 (2009).
- 971. "A Measurement of the t anti-t Cross Section in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV using Dilepton Events with a Lepton plus Track Selection", R.F. Harr with CDF Collaboration, Phys. Rev. D 79, 112007 (2009).
- 972. "Search for Long-Lived Massive Charged Particles in 1.96-TeV p anti-p Collisions", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 021802 (2009).
- 973. "Observation of exclusive charmonium production and gamma gamma ---> mu+mu- in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF collaboration, Phys. Rev. Lett 102, 242001 (2009).
- 974. "Search for the Production of Narrow t anti-b Resonances in 1.9 fb-1 of p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 041801 (2009).

- 975. "Direct Measurement of the W Production Charge Asymmetry in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Plhys. Rev. Lett. 102, 181801 (2009).
- 976. "Measurement of the t anti-t Production Cross Section in 2 fb\*\*-1 of p anti-p Collisions at s\*\*(1/2) =1.96-TeV Using Lepton Plus Jets Events with Soft Muon b-Tagging", R.F. Harr with CDF Collaboration, Phys. Rev. D 79, 052007 (2009).
- 977. "Search for top-quark production via flavor-changing neutral currents in W+1 jet events at CDF", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 151801 (2009).
- 978. "Search for new particles decaying into dijets in proton-antiproton collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 79, 112002 (2009).
- 979. "Observation of New Charmless Decays of Bottom Hadrons", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 103, 031801 (2009).
- 980. "Top Quark Mass Measurement in the Lepton plus Jets Channel Using a Modified Matrix Element Method", R.F. Harr with CDF Collaboration, Phys. Rev. D 79, 072001, (2009).
- 981. "A Search for high-mass resonances decaying to dimuons at CDF", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 091805 (2009).
- 982. "Measurement of W-Boson Helicity Fractions in Top-Quark Decays Using cos theta\*", R.F. Harr with CDF Collaboration, Phys. Lett. B 674, 160-167 (2009).
- 983. "Inclusive Search for Squark and Gluino Production in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 121801 (2009).
- 984. "Measurement of the k(T) Distribution of Particles in Jets Produced in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 232002 (2009).
- 985. "Search for High-Mass e+ e- Resonances in p bar p Collisions at sqrt(s) = 1.96-TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 031801 (2009). Co-authored with Shalhout Shalhout.
- 986. "First Measurement of the Ratio of Branching Fractions B(Lambda0\_b [F0E0?] Lambda+\_c mu- bar(nu\_mu) )/ B(Lambda0\_b [F0E0?] Lambda+\_c pi-)," R.F. Harr with CDF Collaboration, Phys. Rev. D 79, 032001 (2009). Co-authored with Shalhout Shalhout.
- 987. "Search for new physics in the mu mu + e/ mu + E(T) channel with a low-p(T) lepton threshold at the Collider Detector at Fermilab", R.F. Harr with CDF Collaboration, Phys. Rev. D 79, 052004 (2009).
- 988. "Measurement of the Single Top Quark Production Cross Section at CDF," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 101, 252001 (2008). Co-authored with Shalhout Shalhout.
- 989. "Global Search for New Physics with 2.0/fb at CDF," R.F. Harr with CDF Collaboration, Phys. Rev. D 79, 011101 (2009).

  Co-authored with Shalhout Shalhout.
- 990. "Search for a Higgs Boson Decaying to Two W Bosons at CDF," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 021802 (2009).

  Co-authored with Shalhout Shalhout.
- 991. "First simultaneous measurement of the top quark mass in the lepton + jets and dilepton channels at CDF", R.F. Harr with CDF Collaboration, Phys. Rev. D 79, 092005 (2009).
- 992. "Search for Maximal Flavor Violating Scalars in Same-Charge Lepton Pairs in p-pbar Collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 041801 (2009).
  - Co-authored with Shalhout Shalhout.
- 993. "Measurement of Resonance Parameters of Orbitally Excited Narrow B0 Mesons", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 102003 (2009).

- 994. "Search for Doubly Charged Higgs Bosons with Lepton-Flavor-Violating Decays involving Tau Leptons," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 101, 121801 (2008). Co-authored with Shalhout Shalhout.
- 995. "First Direct Bound on the Total Width of the Top Quark in p-pbar Collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 042001 (2009). Co-authored with Shalhout Shalhout.
- 996. "Search for Supersymmetry in p-pbar Collisions at sqrt(s) = 1.96 TeV Using the Trilepton Signature of Chargino-Neutralino Production," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 101, 251801 (2008).

  Co-authored with Shalhout Shalhout.
- 997. "Measurement of the Inclusive Jet Cross Section at the Fermilab Tevatron p-pbar Collider Using a Cone-Based Jet Algorithm," R.F. Harr with CDF Collaboration, Phys. Rev. D 78, 052006 (2008).
  - Co-authored with Shalhout Shalhout.
- 998. "Search for Large Extra Dimensions in Final States Containing One Photon or Jet and Large Missing Transverse Energy Produced in p-pbar Collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 101, 181602 (2008). Co-authored with Shalhout Shalhout.
- 999. "Measurement of the Fraction of t-tbar Production via Gluon-Gluon Fusion in p-pbar Collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. D 79, 031101 (2009).
  - Co-authored with Shalhout Shalhout.
- 1000. "Search for the Higgs Boson Produced with Z to l+l- in p-pbar collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 101, 251803 (2008). Co-authored with Shalhout Shalhout. We were involved in the internal review of this paper. Shalhout's thesis continues this work with additional data and new techniques.
- 1001. "Measurement of the top quark mass with dilepton events selected using neuroevolution at CDF", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 102, 152001 (2009).
- 1002. "Measurement of b-jet Shapes in Inclusive Jet Production in p-pbar Collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. D 78, 072005 (2008). Co-authored with Shalhout Shalhout.
- 1003. "Forward-Backward Asymmetry in Top Quark Production in p-pbar Collisions at srt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 101, 202001 (2008). Co-authored with Shalhout Shalhout.
- 1004. "Search for Flavor Changing Neutral Current Decay  $t \to Zq$  in p-pbar collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 101, 192002 (2008). Co-authored with Shalhout Shalhout.
- 1005. "Search for Heavy, Long-Lived Neutralinos that Decay to Photons at CDF II Using Photon Timing," R.F. Harr with CDF Collaboration, Phys. Rev. D 78, 032015 (2008). Co-authored with Shalhout.
- 1006. "Search for the Rare Decays B+ [F0E0?] mu+mu-K+, B0 [F0E0?] mu+mu-K\*0(892), and B0s [F0E0?] mu+mu-phi at CDF," R.F. Harr with CDF Collaboration, Phys. Rev. D 79, 011104 (2009).
  - Co-authored with Shalhout Shalhout. I chaired the internal editorial board for this paper.
- 1007. Two-Particle Momentum Correlations in Jets Produced in p-pbar Collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. RevD 77, 092001 (2008). Co-authored with Shalhout Shalhout.
- 1008. "Search for Standard Model Higgs Boson Production in Association with a W Boson at CDF," R.F. Harr with CDF Collaboration, Phys. Rev. D 78, 032008 (2008). Co-authored with Shalhout Shalhout. Contributed to the internal review of this paper, and in the internal review of the analysis with Shalhout, due to the close association of this analysis with his.

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- 1009. "Search for Pair Production of Scalar Top Quarks Decaying to a tau Lepton and a b Quark in ppbar Collisions at sqrt{s} = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett 101, 071802 (2008).
  Co-authored with Shalhout Shalhout.
- 1010. "Search for the Higgs boson in events with missing transverse energy and b quark jets produced in proton-antiproton collisions at  $s^{**}(1/2) = 1.96$  TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100, 211801 (2008). Co-authored with Shalhout Shalhout. Contributed to the internal review of this paper, and in the internal review of the analysis with Shalhout, due to the close association of this analysis with his.
- 1011. "First Measurement of ZZ Production in p anti-p Collisions at  $s^{**}(1/2) = 1.96$  TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett 100, 201801 (2008). Co-authored with Shalhout Shalhout.
- 1012. "Measurement of Ratios of Fragmentation Fractions for Bottom Hadrons in p anti-p Collisions at s\*\*(1/2) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. D 77, 072003 (2008). Co-authored with Shalhout Shalhout.
- 1013. "Search for Heavy Top-like Quarks Using Lepton Plus Jets Events in 1.96-TeV p anti-p Collisions," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100, 161803 (2008). Co-authored with Shalhout Shalhout.
- 1014. "Search for New Heavy Particles Decaying to Z0Z0 [F0E0?] eeee in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV," R.F. Harr with CDF Collaboration, Phys. Rev. D 78, 012008 (2008). Co-authored with Shalhout Shalhout.
- 1015. "Observation of Eclusive Dijet Production at the Fermilab Tevatron p-barp Collider," R.F. Harr with CDF Collaboration, Phys. Rev. D 77, 052004 (2008). Co-authored with Shalhout Shalhout.
- 1016. "Model-Independent and Quasi-Model-Independent Search for New Physics at CDF," R.F. Harr with CDF Collaboration, Phys. Rev. D 78, 012002 (2008). Co-authored with Shalhout Shalhout.
- 1017. "Observation of the Decay B+c [F0E0?] J/psi pi+ and Measurement of the B+c Mass," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100, 182002 (2008). Co-authored with Shalhout Shalhout.
- 1018. "First Flavor-Tagged Determination of Bounds on Mixing-Induced CP Violation in B0(s) [F0E0?] J/psi phi Decays," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100, 161802 (2008).
  Co-authored with Shalhout Shalhout.
- 1019. "Measurement of lifetime and decay-width difference in  $B_s^0 \to J/\psi \phi$  decays," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100 121803 (2008). Co-authored with Shalhout Shalhout.
- 1020. "Evidence for D0 anti-D0 mixing using the CDF II Detector," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100, 121802 (2008).
  Co-authored with Shalhout Shalhout. Contributed to the internal review of the analysis and the paper.
- 1021. "Search for B0(s) [F0E0?] mu+ mu- and B0(d) [F0E0?] mu+ mu- decays with 2fb\*\*-1 of p anti-p collisions," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100, 101802 (2008). Co-authored with Shalhout Shalhout. Contributed to the internal review of the analysis and the paper.
- 1022. "First Measurement of the Production of a W Boson in Association with a Single Charm Quark in Proton Anti-proton Collisions at sqrt(s) = 1.96TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100, 091830 (2008). Co-authored with Shalhout Shalhout.

- 1023. "Limits on the production of narrow t anti-t resonances in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV," R.F. Harr with CDF Collaboration, Phys. Rev. D 77, 051102 (2008). Co-authored with Shalhout Shalhout.
- 1024. "Measurement of Inclusive Jet Cross Sections in  $Z/g^{**}$ (to ee) + jets Production in p-pbar Collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100, 102001 (2008). Co-authored with Shalhout Shalhout.
- 1025. "Measurement of the cross section for W-boson Production in association with jets in ppbar collisions at sqrt(s) = 1.96TeV," R.F. Harr with CDF Collaboration, Phys. Rev. D 77, 011108 (2008).
  Co-authored with Shalhout Shalhout.
- 1026. "Search for chargino-neutralino production in p anti-p collisions at 1.96-TeV with high-p(T) leptons," R.F. Harr with CDF Collaboration, Phys. Rev. D 77, 052002 (2008).
- 1027. "Cross Section Constrained Top Quark Mass Measurement from Dilepton Events at the Tevatron," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100 062005 (2008). Co-authored with Shalhout.
- 1028. "First Observation of the Decay  $B(s)0 \to D(s)$  D(s)+ and Measurement of Its Branching Ratio," R.F. Harr and CDF Collaboration, Phys. Rev. Lett. 100, 021803 (2008). Co-authored with Shalhout Shalhout. I made significant contributions to this analysis, working with the student who performed the analysis, and contributed to the internal review of the paper.
- 1029. "Measurement of correlated b-bbar production in p-pbar collisions at s\*\*(1/2) = 1960 GeV," R.F. Harr with CDF Collaboration, Phys. Rev. D 77, 072004 (2008). Co-authored with Shalhout Shalhout.
- 1030. "Search for resonant t anti-t production in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100, 231801 (2008). Co-authored with Shalhout Shalhout.
- 1031. "First Run II Measurement of the W Boson Mass," R.F. Harr with CDF Collaboration, Phys. Rev. D 77, 112001 (2008). Co-authored with Shalhout Shalhout.
- 1032. "A direct Measurement of the W Boson Width in ppbar Collisions at sqrt(s) = 1.96 TeV," Phys. Rev. Lett. 100, 071801 (2008). Co-authored with Shalhout Shalhout.
- 1033. "Observation of Orbitally Excited Bs Mesons," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100, 082001 (2008).
  Co-authored with Shalhout Shalhout.
- 1034. "Search for Standard Model Higgs Bosons Produced in Association with W Bosons," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 100, 041801 (2008).

  Co-authored with Shalhout Shalhout. This work is related to the thesis work of Mr. Shalhout
- 1035. "First Measurement of the W Boson Mass in Run II of the Tevatron, R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 99, 151801 (2007).
  Co-authored with Shalhout Shalhout. I contributed to the review of this paper and worked on a press release for WSU media relations.
- 1036. "Observation and Mass Measurement of the Baryon Xi-b", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 99, 052002 (2007).Co-authored with Shalhout Shalhout. I contributed to the internal review of this paper.
- 1037. "Search for a high-mass diphoton state and limits on Randall-Sundrum gravitons at CDF," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 99, 171801 (2007). Co-authored with Shalhout Shalhout.
- 1038. "Search for chargino-neatralino production in ppbar collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 99, 191806 (2007). Co-authored with Shalhout Shalhout.

- 1039. "Search for exclusive gamma-gamma production in hadron-hadron collisions," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 99, 242002(2007). Co-authored with Shalhout Shalhout.
- 1040. "Search for new physics in high mass electron-positron events in ppbar collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys Rev. Lett. 99, 171802 (2007). Co-authored with Shalhout Shalhout.
- 1041. "Search for Direct Pair Production of Supersymmetric Top and Supersymmetric Bottom Quarks in ppbar Collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. D 76, 072010 (2007).

  Co-authored with Shalhout Shalhout.
- 1042. "Search for New Particles Leading to Z+jets Final States in ppbar Collisions at sqrt(s) 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. D 76, 072006 (2007). Co-authored with Shalhout Shalhout.
- 1043. "Measurement of the ppbar to ttbar production cross-section and the top quark mass at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. D 76, 072009 (2007). Co-authored with Shalhout Shalhout.
- 1044. "First observation of heavy baryons Sigma\_b and Sigma\_b\*," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 99, 202001 (2007).

  Co-authored with Shalhout Shalhout.
- 1045. "Measurement of the top-quark mass using missing Et + jets events with secondary vertex b-tagging at CDF II," R.F. Harr with CDF Collaboration, Phys. Rev. D 75, 111103 (2007). Co-authored with Shalhout Shalhout.
- 1046. "Limits on Anamalous Triple Gauge Couplings in ppbar Collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. D 76, 111103 (2007). Co-authored with Shalhout Shalhout.
- 1047. "Polarization of J/psi and psi(2S) mesons produced in ppbar collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 99, 132001 (2007). Co-authored with Shalhout Shalhout.
- 1048. "Search for heavy, long-lived particles that decay to photons at CDF II," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 99, 121801 (2007). Co-authored with Shalhout Shalhout.
- 1049. "Measurement of sigma(chi(c2)B(chi(c2) ---> J / psi gamma) / sigma(chi(c1)B(chi(c1) ---> J / psi gamma) in p anti-p collisions at s\*\*(1/2) = 1.96-TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 98, 232001 (2007). Co-authored with Shalhout Shalhout.
- 1050. "Precise measurement of the top quark mass in the lepton+jets topology at CDF II," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 99, 182002 (2007). Co-authored with Shalhout Shalhout.
- 1051. "Observation of WZ Production," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 98, 161801 (2007).Co-authored with Shalhout Shalhout.
- 1052. "Search for new physics in lepton + photon + X events with 929 pb-1 of ppbar collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. D 75, 112001 (2007). Co-authored with Shalhout Shalhout.
- 1053. "First Measurement of the Ratio of Central-Electron to Froward-Electron W Partial Cross Sections in p-pbar Collisions at sqrt(s) = 1.96 TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 98, 251801 (2007). Co-authored with Shalhout Shalhout.
- 1054. "Inclusive search for new physics with like-sign dilepton events in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 98, 221803 (2007).
  - Co-authored with Shalhout Shalhout.

- 1055. "Search for anomalous production of multi-lepton events in ppbar collisions at sqrt(s) = 1.96TeV," R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 98, 131804 (2007).
- 1056. "Measurement of the Inclusive Jet Cross Section using the k(T) algorithm in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV with the CDF II Detector", R.F. Harr with CDF Collaboration, Phys. Rev. D 75, 092006 (2007), Erratum-ibid D 75, 119901 (2007).
- 1057. "Measurement of the Helicity Fractions of W Bosons from Top Quark Decays using Fully Reconstructed ttbar Events with CDF II," R.F. Harr with CDF Collaboration, Phys. Rev. D 75, 052001 (2007).
- 1058. "Search for Exotic S=-2 Baryons in proton-antiproton Collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 75, 032003 (2007). This analysis was discussed and reviewed in the B Decays physics group under my direction. I contributed to the internal review of the analysis and paper.
- 1059. "Measurement of the Top Quark Mass in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV using the Decay Length Technique", R.F. Harr with CDF Collaboration, Phys. Rev. D 75, 071102 (2007).
- 1060. "Precision measurement of the top quark mass from dilepton events at CDF II", R.F. Harr with CDF Collaboration, Phys. Rev. D 75, 031105 (2007).
- 1061. "Analysis of the quantum numbers J\*\*PC of the X(3872)", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 98, 132002 (2007).
- 1062. "Measurement of the top-quark mass in all-hadronic decays in p anti-p collisions at CDF II", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 98, 142001 (2007).
- 1063. "Measurement of the B+ production cross-section in p anti-p collisions at  $s^{**}(1/2) = 1960$ -GeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 75, 012010 (2007).
- 1064. "Measurement of the helicity fractions of W bosons from top quark decays using fully reconstructed t anti-t events with CDF II", R.F. Harr with CDF Collaboration, Phys. Rev. D 75, 052001 (2007).
- 1065. "Observation of Exclusive Electron-Positron Production in Hadron-Hadron Collisions", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 98, 112001 (2007).
- 1066. "Search for W-prime boson decaying to electron-neutrino pairs in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 75, 091101 (2007).
- 1067. "Measurement of the Ratios of Branching Fractions B(Bs  $\rightarrow$ Ds pi pi pi) / B(Bd  $\rightarrow$  Dd pi pi pi) and B(Bs  $\rightarrow$  Ds pi) / B(Bd  $\rightarrow$  Dd pi)", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 98, 061802 (2007).
  - This analysis was discussed and reviewed in the B Decays physics group under my direction. I contributed to the internal review of the analysis and paper.
- 1068. "Observation of B0(s) anti-B0(s) Oscillations", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 97, 242003 (2006).
  This analysis was discussed and reviewed in the B Decays physics group that I lead. I was
  - This analysis was discussed and reviewed in the B Decays physics group that I lead. I was a member of the team contributing to this work. I contributed to the internal review of the analysis and paper. I helped to customize the press release of this result for WSU. Over 100 citations to this paper.
- 1069. "Measurement of the Lambda0(b) Lifetime in Lambda0(b)  $\rightarrow$  J/psi Lambda0 in p anti-p Collisions at s\*\*(1/2) = 1.96-TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 98, 122001 (2007).
  - I contributed to the internal review of the analysis and paper.
- 1070. "Search for V+A current in top quark decay in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 98, 072001 (2007).
- 1071. "Measurement of the t anti-t Production Cross Section in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV in the All Hadronic Decay Mode", R.F. Harr with CDF Collaboration, Phys. Rev. D 74, 072005 (2006).

- 1072. "Measurement of the t anti-t Production Cross Section in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV using Lepton + Jets Events with Jet Probability b-tagging", R.F. Harr with CDF Collaboration, Phys. Rev. D 74, 072006 (2006).
- 1073. "Observation of B0 (s) ---> K+ K- and Measurements of Branching Fractions of Charmless Two-body Decays of B0 and B0(s) Mesons in anti-p p Collisions at s\*\*(1/2) = 1.96-TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 97, 211802 (2006). This analysis was discussed and reviewed in the B Decays physics group under my direction. I contributed to the internal review of the analysis and paper.
- 1074. "Search for excited and exotic muons in the mu gamma decay channel in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 97, 191802 (2006).
- 1075. "Measurement of the B0(s) anti-B0(s) Oscillation Frequency", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 97, 062003 (2006).
  This analysis was discussed and reviewed in the B Decays physics group that I lead. I was a member of the team contributing to this work. I contributed to the internal review of the analysis and paper.
- 1076. "Measurement of the t anti-t Production Cross Section in p anti-p Collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 97, 082004 (2006).
- 1077. "Search for a neutral Higgs boson decaying to a W boson pair in p antip collisions at s\*\*(1/2) = 1.96-TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 97, 081802 (2006).
- 1078. "Top quark mass measurement from dilepton events at CDF II with the matrix-element method", R.F. Harr with CDF Collaboration, Phys. Rev. D 74, 032009 (2006).
- 1079. "Measurement of the b jet cross-section in events with a Z boson in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 74, 032008 (2006).
- 1080. "Search for new physics in lepton + photon + X events with 305 pb\*\*-1 of p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 97, 031801 (2006).
- 1081. "Measurement of the ratio of branching fractions B(D0 ---> K+ pi-) / B(D0 ---> K- pi+) using the CDF II Detector", R.F. Harr with CDF Collaboration, Phys. Rev. D 74, 031109 (2006).
  - This analysis was discussed and reviewed in the B Decays physics group under my direction. I contributed to the internal review of the analysis and paper.
- 1082. "The CDF Run IIb Silicon Detector: Design, preproduction, and performance", R.F. Harr with T. Akimoto et al., Nucl. Instrum. Meth. A556, 459 481 (2006).

  I was responsible for the design and construction of crucial elements of this apparatus.
- 1083. "Search for Large Extra Dimensions in the Production of Jets and Missing Transverse Energy in p anti-p Collisions at  $s^{**}(1/2) = 1.96$  TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 97, 171802 (2006).
- 1084. "Measurement of the t anti-t production cross section in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV using missing E(T) + jets events with secondary vertex b-tagging", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 202002 (2006).
- 1085. "Measurement of the B+(c) meson lifetime using B+(c)  $\rightarrow$  J/psi e+ nu(e)", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 97, 012002 (2006).
- 1086. "Search for high-mass resonances decaying to e mu in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 211802 (2006).
- 1087. "Search for Z' ---> e+ e- using dielectron mass and angular distribution", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 211801 (2006).
- 1088. "Measurement of the top quark mass using template methods on dilepton events in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 73, 112006 (2006).

- 1089. "Observation of B0(s)  $\rightarrow$  psi(2S)phi and measurement of ratio of branching fractions B(B0(s)  $\rightarrow$  psi(2S)phi) / B(B0(s)  $\rightarrow$  J/psi phi)", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 231801 (2006).
- 1090. "Measurement of sigma(Lambda(b)0) / sigma(anti-B 0) x B(Lambda0(b) ---> Lambda+(c) pi-) / B(anti-B0 ---> D+ pi-) in p anti-p collisions at S\*\*(1/2) = 1.96-TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 97, 122002 (2007).

  I contributed to the internal review of this paper.
- 1091. "Measurement of the dipion mass spectrum in X(3872) ---> J/psi pi+ pi- decays", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 102002 (2006).
  I contributed to the internal review of this paper.
- 1092. "A Search for scalar bottom quarks from gluino decays in anti-p p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 171802 (2006).
- 1093. "Top quark mass measurement from dilepton events at CDF II", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 152002 (2006).
- 1094. "Measurement of mass and width of the excited charmed meson states D0(1) and D\*0(2) at CDF", R.F. Harr with CDF Collaboration, Phys. Rev. D 73, 051104 (2006).

  This analysis was discussed and reviewed in the B Decays physics group under my lead. I contributed to the internal review of the analysis and paper.
- 1095. "Search for anomalous semileptonic decay of heavy flavor hadrons produced in association with a W boson at CDF II", R.F. Harr with CDF Collaboration, Phys. Rev. D 73, 051101 (2006).
- 1096. "Measurement of the inclusive jet cross section using the k(T) algorithm in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 122001 (2006).
- 1097. "Search for second-generation scalar leptoquarks in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 73, 051102 (2006).
- 1098. "Measurement of the inclusive jet cross section in p anti-p interactions at  $s^{**}(1/2) = 1.96$ TeV using a cone-based jet algorithm", R.F. Harr with CDF Collaboration, Phys. Rev. D 74, 071103 (2006).
- 1099. "Measurement of the top quark mass with the dynamical likelihood method using lepton plus jets events with b-tags in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 73, 092002 (2006).
- 1100. "Measurement of the helicity of W bosons in top-quark decays", R.F. Harr with CDF Collaboration, Phys. Rev. D 73, 111103 (2006).
- 1101. "Search for  $H \to b$  anti-b produced in association with W bosons in p anti-p collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 081803 (2006).
- 1102. "Search for charged Higgs bosons from top quark decays in p anti-p collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 042003 (2006).
- 1103. "A Search for  $t \to tau$  nu q in t anti-t production", R.F. Harr with CDF Collaboration, Phys. Lett. B 639, 172 (2006).
- 1104. "Precision top quark mass measurement in the lepton + jets topology in p anti-p collisions at sqrt(s) = 1.96 TeV", Phys. Rev. Lett. 96, 022004 (2006).
- 1105. "Top quark mass measurement using the template method in the lepton + jets channel at CDF II", R.F. Harr with CDF Collaboration, Phys. Rev. D 73, 032003 (2006).
- 1106. "Direct search for Dirac magnetic monopoles in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 201801 (2006).
- 1107. "Search for neutral MSSM Higgs bosons decaying to tau pairs in p anti-p collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 011802 (2006). item "Search for Bs0  $\rightarrow \mu + \mu$  and Bd0  $\rightarrow \mu + \mu$  decays in p anti-p collisions with CDF II", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 95, 221805 (2005), Erratum-ibid 95,

- 249905 (2005).
- I contributed to the internal review of this paper.
- 1108. "Measurement of b hadron masses in exclusive J/psi decays with the CDF detector", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 202001 (2006).

  I contributed to the internal review of this paper.
- 1109. "Measurement of the ratios of branching fractions B(B(s)0 ---> D(s)- pi+) / B(B0 ---> Dpi+) and B(B+---> anti-D0 pi+) / B(B0 ---> Dpi+)", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 96, 191801 (2006).

  This analysis was discussed and reviewed in the B Decays physics group that I lead. I contributed to the internal review of the analysis and paper.
- 1110. "Search for new high mass particles decaying to lepton pairs in p anti-p collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 95, 252001 (2005).
- 1111. "Search for  $\Lambda 0B \to p\pi$  and  $\Lambda 0B \to pK$  decays in p anti-p collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 72, 051104 (2005). This analysis was discussed and reviewed in the B Decays physics group that I lead. I contributed to the internal review of the analysis and paper.
- 1112. "Search for first-generation scalar leptoquarks in p anti-p collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 72, 051107 (2005).
- 1113. "Search for new physics using high mass tau pairs from 1.96 TeV p anti-p collisions", R.F. Harr with CDF Collaboration, Phys Rev. Lett. 95, 131801 (2005).
- 1114. "Measurement of the t anti-t production cross-section in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV using lepton plus jets events with semileptonic B decays to muons", R.F. Harr with CDF Collaboration, Phys. Rev. D 72, 032002 (2005).
- 1115. "Measurement of B(t ---> Wb)/ B(t ---> Wq) at the collider detector at Fermilab", R.F. Harr with CDF Collaboration, Phys Rev. Lett. 95, 102002 (2005). item "Evidence for the exclusive decay B(c)+- ---> J / psi pi+- and measurement of the mass of the B(c) meson", R.F. Harr with CDF Collaboration, Phys Rev. Lett. 96, 082002 (2006). I contributed to the internal review of this paper.
- 1116. "Measurement of the cross section for t anti-t production in p anti-p collisions using the kinematics of lepton + jets events", R.F. Harr with CDF Collaboration, Phys. Rev. D 72, 052003 (2005).
- 1117. "Search for long-lived doubly-charged doubly charged Higgs bosons in p p-bar collisions at  $\operatorname{sqrt}(s) = 1.96$  TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 95, 071801 (2005).
  - I contributed to the internal review of this paper.
- 1118. "Measurement of the t t-bar production cross section in p p-bar collisions at sqrt(s) = 1.96 TeV using lepton plus jets events with semileptonic B decays to muons", R.F. Harr with CDF Collaboration, Phys. Rev. D 72, 032002 (2005).
- 1119. "Measurement of  $B(t \to Wb)/B(t \to Wq)$  at the Collider Detector at Fermilab", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 95, 102002 (2005).
- 1120. "First evidence for Bs0  $\rightarrow \phi \phi$  decay and measurements of the branching ratio and ACP for B+  $\rightarrow \phi$ K+", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 95, 031801 (2005). This analysis was discussed and reviewed in the B Decays physics group that I lead. I contributed to the internal review of the analysis and paper.
- 1121. "Measurement of the moments of the hadronic invariant mass distribution in semileptonic B decays", R.F. Harr with CDF Collaboration, Phys. Rev. D 71, 051103 (2005).
- 1122. "Measurement of the cross section for prompt diphoton production in p p-bar collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 95, 022003 (2005).
- 1123. "Search for anomalous kinematics in t t-bar dilepton events at CDF II", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 95, 022001 (2005).

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- item "Measurement of the W+W- production cross section in p p-bar collisions at sqrt(s) = 1.96 TeV using dilepton events", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 94, 211801 (2005).
- 1124. "Measurement of the forward-backward charge asymmetry from W ---> e nu production in p anti-p collisions at s\*\*(1/2) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 71, 051104 (2005). item "Search for scalar leptoquark pairs decaying to nu anti-nu q anti-q in p anti-p collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 71, 112001 (2005), Erratum-ibid. D 71, 119901 (2005).
- 1125. "Study of jet shapes in inclusive jet production in p p-bar collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 71, 112002 (2005).
- 1126. "Search for ZZ and ZW production in p p-bar collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys Rev. D 71, 091105 (2005).
- 1127. "Measurement of the J/psi meson and b-hadron production cross sections in p anti-p collisions at  $s(NN)^{**}(1/2) = 1960$ -GeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 71, 032001 (2005).

  I contributed to the internal review of this paper.
- 1128. "Measurement of the lifetime difference between B(s) mass eigenstates", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 94, 101803 (2005).

  This analysis was discussed and reviewed in the B Decays physics group that I lead. I was a member of the team contributing to this work. I contributed to the internal review of the analysis and paper.
- 1129. "Measurement of the cross section for prompt diphoton production in p anti-p collisions at  $s^{**}(1/2) = 1.96$ -TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 95, 022003 (2005). item "Search for anomalous kinematics in t anti-t dilepton events at CDF II", R.F. Harr
  - with CDF Collaboration, Phys. Rev. Lett. 95, 022001 (2005).
- 1130. "Measurement of the t t-bar production cross section in p p-bar collisions at  $\operatorname{sqrt}(s) = 1.96$  TeV using kinematic fitting of b-tagged lepton + jet events", R.F. Harr with CDF Collaboration, Phys. Rev. D 71, 072005 (2005). item "Measurement of partial widths and search for direct CP violation in D0 meson decays to K-K+ and  $\pi$ - $\pi$ +", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 94, 122001
  - This analysis was discussed and reviewed in the B Decays physics group that I lead. I contributed to the internal review of the analysis and paper.
- 1131. "Search for excited and exotic electrons in the e gamma decay channel in p p-bar collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 94, 101802 (2005).
  - I contributed to the internal review of this paper.
- 1132. "Analysis of decay-time dependence of angular distributions in Bs0  $\rightarrow$  J/ $\psi \phi$  and Bd0  $\rightarrow$  J/ $\psi$  K\*0 decays and measurement of the lifetime difference between Bs mass eigenstates", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 94, 101803 (2005). I contributed to the internal review of this paper.
- 1133. "First Measurements of inclusive W and Z cross sections from run II of the Fermilab Tevatron collider", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 94, 091803 (2005). I contributed to the internal review of this paper.
- 1134. "Measurement of the forward-backward charge asymmetry from W  $\rightarrow$  ev production in p p-bar collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 71, 051104 (2005).
- 1135. "Measurement of the t t-bar production cross section in p p-bar collisions at sqrt(s) = 1.96 TeV using lepton + jets events with secondary vertex b-tagging", R.F. Harr with CDF Collaboration, Phys. Rev. D 71, 052003 (2005).

Robert Han

- 1136. "Measurement of the forward-backward charge asymmetry of electron-positron pairs in p p-bar collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 71 052002 (2005).
- 1137. "Measurement of the moments of the hadronic invariant mass distribution in semileptonic B decays", R.F. Harr with CDF Collaboration, Phys. Rev. D 71 051103 (2005).
- 1138. "Measurement of W gamma and Z gamma production in p p-bar collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 94, 041803 (2005).
- 1139. "Search for anomalous production of diphoton events with missing transverse energy at CDF and limits on gauge-mediated supersymmetry-breaking models", R.F. Harr with CDF Collaboration, Phys. Rev. D 71, 031104 (2005).

  I contributed to the internal review of this paper.
- 1140. "Measurement of the J/psi meson and b-hadron production cross sections in p p-bar collisions at sqrt(s) = 1960 GeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 71, 032001 (2005).
  I contributed to the internal review of this paper.
- 1141. "Search for electroweak single-top-quark production in p p-bar collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 71, 012005 (2005).
- 1142. "Search for doubly charged higgs bosons decaying to dileptons in p p-bar collisions at sqrt(s) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 93, 221802 (2004). I contributed to the internal review of this paper.
- 1143. "CDF run IIb silicon detector: Electrical performance and deadtime-less operation", R.F. Harr with T. Akimoto et al., IEEE Trans. Nucl. Sci. 51, 987 (2004).

  I was involved in the development of the apparatus documented in this paper.
- 1144. "Sensors for the CDF Run2b silicon detector", R.F. Harr with K. Hara et al., IEEE Trans. Nucl. Sci. 51, 1546 (2004).
  I was involved in the development of the apparatus documented in this paper.
- 1145. "CDF Run IIib silicon: Stave design and testing", R.F. Harr with R.S. Lu et al., IEEE Trans. Nucl. Sci. 51, 2209 (2004).I was involved in the development of the apparatus documented in this paper.
- 1146. "CDF run IIib silicon: The new innermost layer", R.F. Harr with P. Merkel et al., IEEE Trans. Nucl. Sci. 51, 2215 (2004).

  I was involved in the development of the apparatus documented in this paper.
- 1147. "Measurement of the t t-bar production cross section in p p-bar collisions at sqrt(s) = 1.96 TeV using dilepton events", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 93, 142001 (2004).
- 1148. "Search for the flavor changing neutral current decay  $D0 \rightarrow \mu + \mu$  with the HERA-B detector", R.F. Harr with HERA-B Collaboration, Phys. Lett. B 596 (2004) 173-183. This analysis is based on the thesis of my former Ph.D. student, Jing-Ge Shiu, performed with additional data taken in 2002-2003. Jing-Ge Shiu is a co-author.
- 1149. "Search for B0s  $\rightarrow \mu + \mu$  and B0d  $\rightarrow \mu + \mu$  decays in p anti-p collisions at s\*\*(1/2) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 93 (2004) 032001. I chaired the editorial committee responsible for the writing of this paper.
- 1150. "Observation of the narrow state  $X(3872) \to J/\psi\pi+\pi$  in anti-p p collisions at s\*\*(1/2) = 1.96 TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 93 (2004) 072001. I contributed to the internal review of the paper.
- 1151. "Search for the flavor-changing neutral current decay  $D0 \rightarrow \mu + \mu$  in p anti-p collisions at  $s^{**}(1/2) = 1.96$  TeV", R.F. Harr with CDF Collaboration, Phys. Rev. D 68 (2003) 091101R. I performed this analysis and wrote the paper in collaboration with B. Ashmanskas. This result was the world's best limit on this rare process at the time of publication.
- 1152. "Measurement of the prompt charm meson production cross-sections in p anti-p collisions at  $s^{**}(1/2) = 1.96$  TeV", R.F. Harr with CDF Collaboration, Phys. Rev. Lett. 91 (2003)

Robert Than

241804.

I contributed to the internal review of the paper.

- 1153. "Measurement of the mass difference M(Ds+) M(D+) at CDF II", R.F. Harr with CDF Collaboration, Phys. Rev. D 68 (2003) 072004.

  I contributed to the internal review of the paper.
- 1154. "Inclusive V0 production cross-sections from 920-GeV fixed target proton nucleus collisions", R.F. Harr with HERA-B Collaboration, Eur. Phys. J. C 29 (2003) 181-190. Co-authored with Jing-Ge Shiu.
- 1155. "J/psi production via chi-c decays in 920-GeV pA interactions", R.F. Harr with HERA-B Collaboration, Phys. Lett. B 561 (2003) 61-72.

  The data used in this analysis was collected with the muon detectort for which I led the construction and commissioning. I contributed to the internal review of the paper. Co-authored with Jing-Ge Shiu.
- 1156. "Measurement of the b-bbar Production Cross Section in 920 GeV Fixed-Target Proton-Nucleus Collisions", R.F. Harr with HERA-B Collaboration, Eur. Phys. J. C 26 (2003) 345 355.
  - The result presented in this paper was the principal goal of the entire experimental collaboration for the year 2000. Half the data used in this analysis was collected with the muon detector for which I led the construction and commissioning. I contributed to the internal review of the paper. Co-authored with Jing-Ge Shiu.
- 1157. "A Gaseous Muon Detector for the HERA-B Experiment", A. Arefiev, S. Barsuk, M. Danilov, V. Eiges, B. Fominykh, Yu. Gilitsky, F. Khasanov, T. Kvaratscheliia, L. Laptin, V. Tchoudakov, I. Tichomirov, M. Titov, Yu, Zaitsev, M. Buchler, R.F. Harr, P.E. Karchin, S. Nam, J.G. Shiu, IEEE Trans. on Nucl. Sci., 48 (2001) 1059-1064.
  Co-authored with Jing-Ge Shiu.
- 1158. "The Muon Detector at the HERA-B Experiment", V. Eiges, B. Fominykh, F. Khasanov, T. Kvaratskhelia, L. Laptin, V. Chudakov, I. Tichomirov, M. Titov, Yu. Zaitsev, M. Buchler, R.F. Harr, P.E. Karchin, S. Nam, J.G. Shiu, S.F. Takach, Yu. Gilitsky, Nucl. Instrum. Meth. A461 (2001)104-106.
  Co-authored with Jing-Ge Shiu.
- 1159. "Design and Operation of Front-End Electronics for Large Area Wire Chambers for the HERA-B Muon Detector", M. Buchler, W. Funk, A. Gutierrez, R.F. Harr, P.E. Karchin, P. Liu, S. Nam, J.G. Shiu, S.F. Takach, M. Atiya, D. Padrazo, A. Arefiev, S. Barsuk, F. Khasanov, L. Laptin, V. Tchoudakov, I. Tichimirov, M. Titov, Y. Zaitsev, IEEE Trans. on Nucl. Sci. 46 (1999) 126-132. Co-authored with Jing-Ge Shiu.
- 1160. "Pseudorapidity Distribution of Charged Particles in PbarP Collisions at Sqrt(s)=630GeV", R. Harr, C. Liapis, P. Karchin, C. Biino, S. Erhan, W. Hofmann, P. Kreuzer, D. Lynn, M. Medinnis, S. Palestini, L. Pesando, M. Punturo, P. Schlein, B. Wilkens, J. Zweizig, Phys. Lett. B 401 (1997) 176-180.
  This result is included in the "Review of Particle Properties", a summary of important particle physics results widely used throughout in the field.
- 1161. "Calculation of Track and Vertex Errors for Detector Design Studies", R. Harr, IEEE Trans. Nucl. Sci. 42 (1995)134-147. item "Tracking Detector Alignment Using Constrained Vertex Fits", R. Harr, C. Liapis, P. Karchin, C. Biino, S. Erhan, W. Hofmann, P. Kreuzer, D. Lynn, M. Medinnis, S. Palestini, L. Pesando, M. Punturo, P. Schlein, B. Wilkens, J. Zweizig, IEEE Trans. Nucl. Sci. 41 (1994)796-803.
  - item "Development and Test of a Large Silicon Strip System for a Hadron Collider Beauty Trigger", J. Ellet et al., Nucl. Inst. Meth. A317 (1992)28-46.
- 1162. "Test of a Large Silicon Strip Micro-vertex Detector at the SpbarpS", R. Harr, Nucl. Inst. Meth. A315 (1992)139-42.

- 1163. "Results from Double-sided Silicon Microstrip Detector with Field Plate Separation", R. Brenner *et al.*, Nucl. Inst. Meth. A326 (1993)198-203.
- 1164. "Measurement of the Spatial Resolution of Double-sided Double-metal AC-coupled Silicon Microstrip Detectors", R. Brenner et al., Nucl. Inst. Meth. A326 (1993)189-197.
- 1165. "The MARKII Vertex Drift Chamber", J. Alexander et al., Nucl. Inst. Meth. A283 (1989) 519-527.
- 1166. "Prototype Results of a High Resolution Vertex Drift Chamber for the MARKII SLC Upgrade Detector", J. Alexander *et al.*, Nucl. Inst. Meth. A252 (1986) 350-356.
- 1167. "Measurement of the Charged Multiplicity of Events Containing Bottom Hadrons at Ecm=91 GeV", B. Schumm *et al.*, Phys. Rev. D46 (1992) 453-6.
- 1168. "Measurement of the b\={b} Fraction in Hadronic Z0 Decays with Precision Vertex Detectors", R. Jacobsen *et al.*, Phys. Rev. Lett. 67 (1991) 3347-50.
- 1169. "Search for Elastic Nondiagonal Lepton-Pair Production in e+e- Annihilation at  $[\sqrt{s} = 29 \,\text{GeV}]$ ", J. Gomez-Cadenas *et al.*, Phys. Rev. Lett. 66 (1991) 1007-10.
- 1170. "Searches for Supersymmetric Particles Produced in Z-Boson Decay", T. Barklow *et al.*, Phys. Rev. Lett. 64 (1990) 2984-7.
- 1171. "Direct Search for Pair Production of Heavy Stable Charged Particles in Z Decays", E. Soderstrom et al., Phys. Rev. Lett 64 (1990) 2980-3.
- 1172. "Search for Nonminimal Neutral Higgs Bosons from Z-Boson Decays", S. Komamiya *et al.*, Phys. Rev. Lett. 64 (1990) 2881-4.
- 1173. "A Search for Decays of the Z to Unstable Neutral Leptons with Mass Between 2.5-GeV and 22-GeV", P. Burchat *et al.*, Phys. Rev. D41 (1990) 3542.
- 1174. "Search for Doubly Charged Higgs Scalars in Z Decay", M. Swartz et al., Phys. Rev. Lett. 64 (1990) 2877-80.
- 1175. "A Reanalysis of B0--Anti-B0 Mixing in e+e- Annihilation at 29-GeV", A. Weir *et al.*, Phys. Lett. 240 (1990) 289.
- 1176. "Measurements of Charged Particle Inclusive Distributions in Hadronic Decays of the Z Boson", G. Abrams *et al.*, Phys. Rev. Lett. 64 (1990) 1334.
- 1177. "Measurement of the  $b\bar{b}$  Fraction in Hadronic Z Decays", F. Kral et al., Phys. Rev. Lett. 64 (1990) 1211-4.
- 1178. "Measurement of the  $B^0$ -Meson Lifetime", S. Wagner *et al.*, Phys. Rev. Lett. 64 (1990) 1095-8.
- 1179. "Upper Limits on D+- and B+- Decays to Two Leptons Plus Pi+- or K+-", A. Weir *et al.*, Phys. Rev. D41 (1990) 1384.
- 1180. "Search for Long-Lived Massive Neutrinos in Z Decays", C. Jung et al., Phys. Rev. Lett. 64 (1990) 1091-4.
- 1181. "Determination of  $a_s$  from a Differential Multiplicity Distribution in  $e^+e^-$  Collisions at  $\sqrt{s} = 29$  and 91 GeV", S. Komamiya *et al.*, Phys. Rev. Lett. 64 (1990) 987-90.
- 1182. "Measurement of Z Decays into Lepton Pairs", G. Abrams et al., Phys. Rev. Lett. 63 (1989) 2780-2783.
- 1183. "Searches for New Quarks and Leptons Produced in Z-Boson Decay", G. Abrams *et al.*, Phys. Rev. Lett. 63 (1989) 2447-51.
- 1184. "Measurements of the Z-Boson Resonance Parameters in e+e- Annihilation", G. Abrams *et al.*, Phys. Rev. Lett. 63 (1989) 2173-6.
- 1185. "First Measurements of Hadronic Decays of the Z Boson", G. Abrams *et al.*, Phys. Rev. Lett. 63 (1989) 1558-61.
- 1186. "Initial Measurement of Z-Boson Resonance Parameters in e+e- Annihilation", G. Abrams et al., Phys. Rev. Lett. 63 (1989) 724-7.
- 1187. "The MARKII detector for the SLC", G. Abrams et al., Nucl. Inst. Meth. A281 (1989) 55-80.

- 1188. "Search for B Decay to Higgs Bosons for Higgs Boson Masses Between 50 MeV/c2 and 210 MeV/c2", A. Snyder *et al.*, Phys. Lett. B229 (1989)169.
- 1189. "Studies of Jet Production Rates in e+e- Annihilation at ECM=29 GeV", S. Bethke  $et\ al.$ , Z. Phys. C43 (1989) 325.
- 1190. "Searches for NonMinimal Higgs Bosons from A Virtual Z Decaying into a Muon Pair at PEP", S. Komamiya et al., Phys. Rev. D40(1989)721.
- 1191. "Determination of Alpha-s from Energy-Energy Correlation in e+e-Annihilation at 29 GeV", D.R. Wood *et al.*, Phys. Rev. D37 (1988) 3091.
- 1192. "Multi-Hadronic Events at  $E_{\rm CM}=29\,{\rm GeV}$  and Predictions of QCD Models from  $E_{\rm CM}=29\,{\rm GeV}$  to  $E_{\rm CM}=93\,{\rm GeV}$ ", A. Petersen *et al.*, Phys. Rev. D37 (1988) 1.
- 1193. "Measurement of the  $D^0$  Lifetime from the Upgraded MARK-II Detector at PEP", S.R. Wagner *et al.*, Phys. Rev. D36 (1987) 2850.

# E. Invited Review Articles

# F. Nonrefereed Journals

References to arXiv (online preprint server at Cornell University) can be found at http://arXiv.org/abs/followed by the preprint number number.

Y. Amhis *et al.* [Heavy Flavor Averaging Group (HFAG) Collaboration], "Averages of b-hadron, c-hadron, and  $\tau$ -lepton properties as of summer 2014," arXiv:1412.7515 [hep-ex].

"Averages of B-Hadron, C-Hadron, and tau-lepton properties as of early **2012**", Y. Amhis *et al.* [Heavy Flavor Averaging Group Collaboration], arXiv:1207.1158 [hep-ex] (2012).

"Review of  $B_s$  mesons and b Baryons", R. F. Harr, arXiv:1201.4506 [hep-ex] (2012).

"Time-integrated mixing probability towards an A(SL) measurement at CDF", R. Harr [CDF Collaboration], PoS BEAUTY **2011**, 025 (2011).

"Averages of b-hadron and c-hadron Properties at the End of 2007", R. Harr with the Heavy Flavor Averaging Group (HFAG) Collaboration, arXiv:0808.1297 (2008).

"Averages of B Hadron Properties at the End of 2006", R. Harr with the Heavy Flavor Averaging Group (HFAG) Collaboration, arXiv:0704.3575 (2007).

"Averages of B Hadron Properties at the End of 2005", R. Harr with the Heavy Flavor Averaging Group (HFAG) Collaboration, arXiv: hep-ex/0603003 (2006).

"Averages of B Hadron Properties as of Winter 2005", R. Harr with the Heavy Flavor Averaging Group (HFAG) Collaboration, arXiv: hep-ex/0505100 (2005).

# IV. Papers Published in Conference Proceedings

### A. Refereed Papers

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## B. Nonrefereed Papers

"Rare Decays of B and D Hadrons at CDF," R.F. Harr for the CDF Collaboration, FERMILAB-CONF-08-464-E(2008), Presented at the 34th International Conference on High Energy Physics (ICHEP 2009), Philadelphia, Pennsylvania, 30 Jul. – 5 Aug. 2008, arXiv: 0810.3444.

"Recent results from CDF", R.F. Harr for the CDF collaboration, FERMILAB-CONF-04-008-E, Jan. 2004. Presented at the 9th International Conference on B Physics at Hadron Machines (Beauty 2003), Pittsburgh, Pennsylvania, 14-18 Oct. 2003.

"Summary of the Particle Physics and Technology Working Group", S. Lammel, W.H. Smith, R. Harr, S. Magill, M. Procario, R. Ruchti, A. Sopczak, R. Wilson, R. Zhu, prepared for APS/DPF/DPB Summer Study on the Future of Particle Physics, Snowmass 2001, Snowmass CO, July 2001, SNOWMASS-2001-E7001, Dec. 2001, 19pp.

"Status and Plans for HERA-B", R. Harr for the HERA-B Collaboration, in the Proceedings of Frontiers in Contemporary Physics '01, Vanderbilt University, Nashville, TN, Editor: Robert Panvini, March 2001.

"Comparison of Forward Collider Vertex Detectors for B Physics at Hadron Accelerators", R. Harr, P. Karchin, and C. Kennedy, in the Proceedings of the Workshop on B Physics at Hadron Accelerators, Snowmass, Colorado, USA, Editors: Patricia McBride and C. Shekhar Mishra, June-July 1993.

"Measurement of the Angle Gamma With a Forward Collider Detector", P. Karchin et al., in the Proceedings of the Workshop on B Physics at Hadron Accelerators, Snowmass, Colorado, USA, Editors: Patricia McBride and C. Shekhar Mishra, June-July 1993.

"Comparison of Forward and Central Collider Detectors for Beauty Physics", C. Kennedy, R. Harr, and P. Karchin, in the Proceedings of the Workshop on B Physics at Hadron Accelerators, Snowmass, Colorado, USA, Editors: Patricia McBride and C. Shekhar Mishra, June-July 1993.

"A CMOS Low Noise and Self-triggered Multichannel Readout Chip for Low Energy X-Ray Detection", R. Harr et al., proceedings of the "European Workshop on X-Ray Detectors for Synchrotron Radiation Sources", Aussois, France, Sept. 9 to Oct. 10, 1991.

### C. Invited Seminars or Lectures Presented in Last Five Years

- "Modern Physics in the Classroom", Metro Detroit Science Teachers Association Conference, Woodhaven High School, Woodhaven MI, Nov. 2014.
- "Why the Higgs Boson?", The Triple Helix Conference, Wayne State University, Detroit MI, March 2014.
- 3. "Modern Physics in the Classroom", Metro Detroit Science Teachers Association Conference, Woodhaven High School, Woodhaven MI, Nov. 2013.
- "Stalking the Higgs Boson: A Subatomic Safari", Michigan Science Teachers Association Conference, Eastern Michigan University, Ypsilanti MI, Mar. 2013.
- "Quarkonium Production at the Tevatron", Workshop on Heavy Flavor Production at Hadron Colliders, Lawrence Berkeley National Laboratory, Berkeley CA, Jan. 2013.
- 6. "Stalking the Elusive Higgs Boson", Science Under the Dome, WSU, Dec. 2012.
- 7. "The Higgs Boson", President's Higgs Boson Event, WSU, Oct. 2012.
- "Mixing and Mixing-Related Asymmetries in the B System at the Tevatron", CKM 2012, Cincinnati OH, Oct. 2012.
- 9. "Sighting the Higgs Boson: A Field Guide", Phi Beta Kappa Detroit Chapter, Farmington Hills, MI, Sept. 2012.
- 10. "Sighting the Higgs Boson: A Field Guide", Special Physics Seminar, University of Windsor, Windsor Canada, Sept. 2012.
- 11. "Trapping the Higgs Boson: A Practical Guide", Physics Colloquium, WSU, Sept. 2012.
- 12. "Searches fot New Physics in Heavy Flavor Decays at CDF". BEACH 2012. Wichita KS. July 2012.

- 13. "Particle Physics and Astronomy", Camp Cosmos, WSU, June 2012.
- "CP Asymmetries in Charm Decays", Conference on Intersections of Particle and Nuclear Physics, CIPANP 2012, St. Petersburg FL, June 2012.
- 15. "Who Shot Higgs", Detroit Country Day School, Beverly Hills MI, May 2012.
- 16. "Wanted: The Higgs Boson", Detroit Metro Area Physics Teachers meeting, WSU, May 2012.
- 17. "Heavy Flavor at the Tevatron", Chicago Workshop on LHC Physics, University of Chicago, Chicago IL, May 2012.

### D. Other Scholarly Work

- "Exclusive and semi-exclusive rare W boson decays", C.J. Clarke, R.F. Harr, A. Kropivnitskaya, and A. Sakharov, CMS internal note CMS AN-13-081, November 2016.
- "Unpacking and Reformatting the CSC Raw Data", R.F. Harr, A.Sakharov, et al., CMS internal note CMS IN-2009/029, August 2009.
- "A Search for the Production and Decay Process  $ZH \to l^+ l^- b\bar{b}$  in 2.7/fb using the Matrix Element Method," R.F. Harr and S.Z. Shalhout with R. Shekhar, B. Jayatilaka, B. Kilminster, D. Whiteson, and A. Kotwal, CDF note 9718, March 2009.
- "A Search for  $ZH \rightarrow llbb$  in 2.7/fb using the Matrix-element Method," R.F. Harr and S.Z. Shalhout with R. Shekhar, B. Jayatilaka, B. Kilminster, D. Whiteson, and A. Kotwal, CDF note 9696, February 2009.
- "A Search for  $ZH \to llbb$  in 2.7/fb using a Neural Network Discriminant," R.F. Harr and S. Shalhout with Richard Hughes, Ben Kilminster, Brandon Parks, Brian Winer, Bo Jayatilaka, Ashutosh Kotwal, Ravi Shekhar, Daniel Whiteson, CDF note 9665, January 2009.
- "A Search for  $ZH \to llbb$  in 2.7/fb using a Neural Network Discriminant," R.F. Harr and S. Shalhout with Richard Hughes, Ben Kilminster, Brandon Parks, Brian Winer, Bo Jayatilaka, Ashutosh Kotwal, Ravi Shekhar, Daniel Whiteson, CDF note 9543, September 2008.
- "Frequentist Limit for D0 --> mumu Analysis", R.F. Harr with E. Berry, I.K. Furic, and Y.K. Kim, CDF note 9501, Aug. 2008.
- "A Search for ZH->llbb in 2.4 fb-1 using a Neural Network Discriminant", [2028?]R.F. Harr and S. Shalhout with Richard Hughes, Ben Kilminster, Brandon Parks, Brian Winer, Bo Jayatilaka, Ashutosh Kotwal, Ravi Shekhar, Daniel Whiteson, CDF note 9475, Aug. 2008.
- "A Search for ZH to l+l-bbar in 2.4 fb-1 using a Neural Network discriminant", R.F. Harr and S.Z. Shalhout with Richard Hughes, Ben Kilminster, Brandon Parks, Brian Winer, Bo Jayatilaka, Ashutosh Kotwal, Ravi Shekhar, Daniel Whiteson, CDF note 9406, July 2008.
- "A Search for  $ZH \to llbb$  in 2/fb using the Matrix-Element Method", R.F. Harr and S.Z. Shalhout with Ravi Shekhar, Bodhitha Jayatilaka, Ben Kilminster, Daniel Whiteson, Ashutosh Kotwal, CDF note 9397, July 2008.
- "Search for D0 to mumu with 360pb-1 of data, public note", R.F. Harr with Edmund Berry, Ivan Furic, Young Kee Kim, CDF note 9226, March 2008.
- "Search for FCNC D0 to mumu Decays Using 360 pb-1 of CDF Run II Data", R.F. Harr with E. Berry, I.K. Furic, and Y.K. Kim, CDF note 8791, April 2007.
- "Study of Muon Matching Efficiencies and Mistag Rates", R.F. Harr with E. Berry, et al. I.K. Furic, and Y.K. Kim,, CDF note 8042, January 2006.
- "Averages of B-hadron properties at the end of 2005", R.F. Harr with Heavy Flavor Averaging Group, arXiv:hep-ex/0603003, March 2006.

"Averages of B-hadron properties as of winter 2005", R.F. Harr with Heavy Flavor Averaging Group, arXiv:hep-ex/0505100, May 2005.

"CDF Run IIB silicon: The new innermost layer", R. Harr with P. Merkel et al., Fermilab-Pub-03-374-E, Feb. 2004, 5pp.

"Recent results from CDF", R. Harr, Fermilab-Conf-04-008-E, Jan. 2004, 5pp.

"CDF Run IIB silicon vertex detector DAQ upgrade", R. Harr with S. Behari et al., Fermilab-Conf-03-406-E, Dec. 2003, 6pp.

"CDF Run IIB silicon vertex detector DAQ upgrade", R. Harr with N. Bacchetta et al., Fermilab-Pub-03-376-E, Dec. 2003, 6pp.

"Search for the FCNC decay D0 to mu+mu- using the hadronic B trigger", B. Ashmanskas and R. Harr, CDF note #6273 (2003).

"CDF RUN IIb: Cables and Connectors Between COT and JPC (Layer 1 or Higher)", A. Gutierrez, R. Harr, and S. Zimmermann, Fermilab Engineering note #ESE-CDF-20020515 (2002).

#### V. SERVICE

- A. Administrative Appointments at Wavne State in Last Five Years
- B. Administrative Appointments at Other College/University in Last Five Years
- C. Committee Assignments in Last Five Years
  - 1. University Committee Chaired
  - 2. University Committee Membership
    - 2016-17 General Education Reform Committee, Engagement Subcommittee 2014-17 General Education Oversight Committee
  - 3. College/Department Committee Chaired
    - 2016-17 Undergraduate Recruiting and Retention Committee
    - 2015-16 2170/80 Curriculum Reform Committee
    - 2014-15 Undergraduate Recruiting and Retention Committee
    - 2011-12 Qualifying Exam Committee
  - 4. College/Department Committee Membership
    - 2016 (W) Particle/Astro/Nuclear Seminar Organizer
    - 2016 CLAS Safety Committee
    - 2015-16 CLAS P&T Committee
    - 2015-16 CLAS General Education Reform Committee
    - 2015-17 2170/80 Curriculum Reform Committee
    - 2014-15 Electronics Lab Committee
    - 2014-17 Advanced Modern Physics Lab Committee
    - 2014-17 Assessment Implementation Committee
    - 2014-15 Learning Communities and Discussion Sections Oversight Committee

- 2012-16 Physics Department Executive Committee
- 2012-17 Undergraduate Recruiting and Retention Committee
- 2011-13 Undergraduate Course Review Committee
- D. Positions Held in Professional Associations in Last Five Years
- E. Membership/Offices Held in Public or Private Agencies Related to Discipline in Last Five Years
- F. Professional Consultation
  - 1. Public Presentations as an Expert in Discipline
  - 2. Testimony before Public Bodies
  - 3. Consulting to Public Agencies, Foundations, Professional Associations

#### Referee:

- 2015-16 Physical Review D (1 article)
- 2014-15 Physical Review D (1 article)
- 2014-15 U.S. Department of Energy (1 proposal)
- 2013-14 Physical Review D (1 article)
- 2012-13 Physical Review D (1 article), Physics Letters B (1 article)
- 4. Consulting to Private Enterprises 2013-14 Review of book chapters for Cengage Learning
- G. Journal/Editorial Activity
  - 1. Editorships
  - 2. Editorial Board Memberships
- H. Other Professionally Related Service

Chair of the organizing committee for the 2017 US CMS Collaboration meeting, to be held at Wayne State in May 2017.

CMS Analysis Review Committee (1) 2015-16

Member of the Editorial Committee for CDF from Jan. 2014 to present.

Member of the organizing committee for CHARM 2015, held at Wayne State in May 2015.

Member of the conference program committee for CKM 2012, held in Cincinnati OH in Sept. 2012.

Heavy Flavor Group Convener for CDF from Jan. 2011 to June 2013. Responsible for coordinating, checking, and approving analyses by a group of approximately 100 physicists and students. Responsible to see that approved results are published in a timely manner and arrange appropriate conference talks for presenting the results.

Convener of the Rare Decays subgroup of the Heavy Flavor Averaging Group, July 2004 to Dec. 2014. This group compiles and averages measurements of B hadron decays and distributes the results to researchers worldwide. Along with responsibility for entering and updating CDF measurements, I am responsible for generating the tables and plots that appear on the web site, see http://www.slac.stanford.edu/xorg/hfag/ for the results.

Project leader of the WSU Quarknet program to bring high school science teachers into contact with university researchers, Jan. 2004 to present.

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