Selected Publications (Young-Kee Kim)

September 2013

Top Quark: Mass Measurements

1) "Top-quark mass measurement in events with jets and missing transverse energy using the full CDF data set"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev. D88 (2013) 011101.

2) "Measurement of the Mass Difference Between Top and Anti-top Quarks at CDF"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev. D87 (2013) 052013.

3) "Precision Top-Quark Mass Measurements at CDF"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev.Lett. 109 (2012) 152003.

4) "Combination of the top-quark mass measurements from the Tevatron collider"
By CDF and D0 Collaborations (T. Aaltonen et al.). Phys.Rev. D86 (2012) 092003.

5) "Top-quark mass measurement using events with missing transverse energy and jets at CDF"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev.Lett. 107 (2011) 232002.

6) "Top quark mass measurement using the template method at CDF"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev. D83 (2011) 111101.

7) "Measurement of the mass difference between top and anti-top quarks"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev.Lett. 106 (2011) 152001.

8) "Top Quark Mass Measurement using m_T^2 in the Dilepton Channel at CDF"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev. D81 (2010) 031102.

9) "First simultaneous measurement of the top quark mass in the lepton + jets and dilepton channels at CDF"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev. D79 (2009) 092005.

10) "Precise measurement of the top quark mass in the lepton+jets topology at CDF II"
By CDF Collaboration (A. Abulencia et al.). Phys.Rev.Lett. 99 (2007) 182002.

11) "Measurement of the top quark mass using template methods on dilepton events in proton antiproton collisions at $\sqrt{s}$ =1.96 TeV"
By CDF Collaboration (A. Abulencia et al.). Phys.Rev. D73 (2006) 112006.

12) "Precision top quark mass measurement in the lepton + jets topology in p anti-p collisions at $\sqrt{s}$ =1.96 TeV"
By CDF Collaboration (A. Abulencia et al.). Phys.Rev.Lett. 96 (2006) 022004.

13) "Top quark mass measurement using the template method in the lepton + jets channel at CDF II"
By CDF Collaboration (A. Abulencia et al.). Phys.Rev. D73 (2006) 032003.

Top Quark: Width (or Lifetime) Measurements

14) "A Direct Measurement of the Total Decay Width of the Top Quark"
By CDF Collaboration (Timo Antero Aaltonen et al.). arXiv:1308.4050 [hep-ex].

15) "Direct Top-Quark Width Measurement CDF"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev.Lett. 105 (2010) 232003.

16) "First Direct Bound on the Total Width of the Top Quark in pp-bar Collisions at √s =1.96 TeV"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev.Lett. 102 (2009) 042001.

Discovery of the Top Quark

17) "Observation of top quark production in pp-bar collisions"
By CDF Collaboration (F. Abe et al.). Phys.Rev.Lett. 74 (1995) 2626-2631.

18) "Evidence for top quark production in pp-bar collisions at √s =1.8 TeV"
By CDF Collaboration (F. Abe et al.). Phys.Rev.Lett. 73 (1994) 225-231.

19) "Evidence for top quark production in pp-bar collisions at √s =1.8 TeV"
By CDF Collaboration (F. Abe et al.). Phys.Rev. D50 (1994) 2966-3026.

W Boson: Mass Measurements

20) "Combination of CDF and DZero results on W boson mass and width"
By CDF and D0 Collaborations (V.M. Abazov et al.). Phys.Rev. D70 (2004) 092008.

21) "Measurement of the W boson mass with the Collider Detector at Fermilab"
By CDF Collaboration (T. Affolder et al.). Phys.Rev. D64 (2001) 052001.

22) "The W mass at the Tevatron collider"
By Y.K. Kim. Frascati Phys.Ser. 14 (1999) 553-560.

23) "Measurement of the W boson mass"
By CDF Collaboration (F. Abe et al.). Phys.Rev.Lett. 75 (1995) 11-16.

24) "Measurement of the W boson mass"
By CDF Collaboration (F. Abe et al.). Phys.Rev. D52 (1995) 4784-4827.

25) "Measurements of the mass and width of the W boson from CDF"
By CDF Collaboration (Young-Kee Kim for the collaboration).
In *Meribel les Allues 1994, Proceedings, '94 electroweak interactions and unified theories* 41-49, and Fermilab Batavia - FERMILAB-Conf-94-169 (94/06,rec.Aug.) 9 p.

W Boson: Width Measurements

26) "Combination of CDF and D0 results on the W boson width"
By Tevatron Electroweak Working Group and CDF and D0 Collaboration (B. Ashmanskas et al.). hep-ex/0510077.

27) "Direct measurement of the W boson width in pp-bar collisions at √s =1.8 TeV"
By CDF Collaboration (T. Affolder et al.). Phys.Rev.Lett. 85 (2000) 3347-3352.

28) "A Direct measurement of the W boson width"
By CDF Collaboration (F. Abe et al.). Phys.Rev.Lett. 74 (1995) 341-345.

Search for the Higgs Boson

29) "Higgs Boson Studies at the Tevatron"
By CDF and D0 Collaborations (T. Aaltonen et al.). arXiv:1303.6346 [hep-ex].

30) "Combination of searches for the Higgs boson using the full CDF data set"
By CDF Collaboration (T. Aaltonen et al.). arXiv:1301.6668 [hep-ex].

31) "Updated search for the standard model Higgs boson in events with jets and missing transverse energy using the full CDF data set"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev. D87 (2013) 052008.

32) "Combined search for the standard model Higgs boson decaying to a bb pair using the full CDF data set"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev.Lett. 109 (2012) 111802.

33) "Combined CDF and D0 Upper Limits on Standard Model Higgs Boson Production with up to 8.2fb^{-1} of Data"
By CDF and D0 Collaborations (T. Aaltonen et al.). arXiv:1103.3233 [hep-ex].

Electroweak Physics

34) "Search for WZ+ZZ production with MET + jets with *b* enhancement at √s =1.96 TeV"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev. D85 (2012) 012002.

35) "Measurement of the forward-backward charge asymmetry of electron positron pairs in pp-bar collisions at √s =1.96 TeV"
By CDF Collaboration (D. Acosta et al.). Phys.Rev. D71 (2005) 052002.

36) "First measurements of inclusive W and Z cross sections from Run II of the Tevatron collider"
By CDF Collaboration (D. Acosta et al.). Phys.Rev.Lett. 94 (2005) 091803.

37) "Measurement of the lepton charge asymmetry in W boson decays produced in pp-bar collisions"
By CDF Collaboration (F. Abe et al.). Phys.Rev.Lett. 81 (1998) 5754-5759.

38) "Precision tests of the electroweak interaction from hadron hadron colliders"
By Y.K. Kim. Conf.Proc. C9707281 (1997) 493-514.

39) "Limits on WWZ and WWγ couplings from WW and WZ production in pp-bar collisions at $\sqrt{s}$ =1.8 TeV"
By CDF Collaboration (F. Abe et al.). Phys.Rev.Lett. 75 (1995) 1017-1022.

40) "The Charge asymmetry in W boson decays produced in pp-bar collisions at $\sqrt{s}$ =1.8 TeV"
By CDF Collaboration (F. Abe et al.). Phys.Rev.Lett. 74 (1995) 850-854.

41) "Measurement of the ratio σ B(W → eν) / σ B(Z → e+e-) in pp-bar collisions at $\sqrt{s}$ =1.8 TeV"
By CDF Collaboration (F. Abe et al.). Phys.Rev.Lett. 73 (1994) 220-224.

Bottom Quark Physics

42) "Updated Search for the Flavor-Changing Neutral-Current Decay $D^0 \rightarrow \mu^+\mu^-$"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev. D82 (2010) 091105.

43) "Observation of B^0_s - anti- B^0_s Oscillations"
By CDF Collaboration (A. Abulencia et al.). Phys.Rev.Lett. 97 (2006) 242003.

44) "Measurement of the B^0_s - anti- B^0_s Oscillation Frequency"
By CDF Collaboration (A. Abulencia et al.). Phys.Rev.Lett. 97 (2006) 062003.

45) "Measurement of the ratios of branching fractions $B(B_s^0 \rightarrow D_s^-\pi^+)/B(B^0 \rightarrow D^-\pi^+)$ and $B(B^+ \rightarrow D^0\pi^+)$ / $B(B^0 \rightarrow D^-\pi^+)$"
By CDF Collaboration (A. Abulencia et al.). Phys.Rev.Lett. 96 (2006) 191801.

46) "Measurement of the mass difference $m(D_s^+)$ - $m(D^+)$ at CDF II
By CDF Collaboration (D. Acosta et al.). Phys.Rev. D68 (2003) 072004.

47) "A measurement of sin(2β) from B →J/psi K^0_S with the CDF detector
By CDF Collaboration (T. Affolder et al.). Phys.Rev. D61 (2000) 072005.

48) "Measurement of the CP-violation parameter sin(2β) in B_d^0 B_d^0-bar → J/psi K^0_S decays"
By CDF Collaboration (F. Abe et al.). Phys.Rev.Lett. 81 (1998) 5513-5518.

QCD physics

49) "A comparison of quark and gluon jets produced in high-energy e^+e^- annihilations"
By AMY Collaboration (Young-Kee Kim et al.). Phys.Rev.Lett. 63 (1989) 1772.

Search for New Physics

50) "Search for new physics in high p_T like-sign dilepton events at CDF II"
By CDF Collaboration (T. Aaltonen et al.). Phys.Rev.Lett. 107 (2011) 181801.

51) "Inclusive search for new physics with like-sign dilepton events in pp-bar collisions at $\sqrt{s}$ =1.96 TeV"
By CDF Collaboration (A. Abulencia et al.). Phys.Rev.Lett. 98 (2007) 221803.

52) "Inclusive search for anomalous production of high p_T like-sign lepton pairs in pp-bar collisions at $\sqrt{s}$ =1.96 TeV"
By CDF Collaboration (D. Acosta et al.). Phys.Rev.Lett. 93 (2004) 061802.

Instrumentation

ATLAS Experiment: FTK Trigger

53) "A fast hardware tracker for the ATLAS trigger system"
By J. Anderson, A. Andreani, A. Andreazza, A. Annovi, M. Atkinson, B. Auerbach, M. Beretta, V. Bevacqua et al. Nucl.Instrum.Meth. A718 (2013) 258-259.

54) "FTK: A fast track trigger for ATLAS"
By J. Anderson, A. Andreani, A. Andreazza, A. Annovi, M. Atkinson, B. Auerbach, M. Beretta, V. Bevacqua et al. JINST 7 (2012) C10002.

55) "The Fast Tracker real time processor and its impact on muon isolation, tau and *b*-Jet online selections at ATLAS"
By A. Andreani, A. Andreazza, A. Annovi, M. Beretta, V. Bevacqua, G. Blazey, M. Bogdan, E. Bossini et al. IEEE Trans.Nucl.Sci. 59 (2012) 348-357.

56) "Development of FTK architecture: a fast hardware track trigger for the ATLAS detector"
By A. Annovi, M. Beretta, E. Bossini, A. Boveia, E. Brubaker, F. Canelli, V. Cavasinni, F. Crescioli et al. arXiv:0910.1126 [physics.ins-det].

CDF Experiment: Second-Level Trigger

57) "Performance study of GPUs in real-time trigger applications for HEP experiments"
By W. Ketchum, S. Amerio, D. Bastieri, M. Bauce, P. Catastini, S. Gelain, K. Hahn, Y.K. Kim et al.. Phys.Procedia 37 (2012) 1965-1972.

CDF Experiment: Tracking Detector

58) "CDF central outer tracker"
By CDF Collaboration (Anthony Allen Affolder et al.). Nucl.Instrum.Meth. A526 (2004) 249-299.

AMY Experiment: Tracking Detector

59) "The Design of the AMY central drift chamber and performance in a 3-T magnetic field"
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CDF Experiment: Time-of-Flight Detector

60) "A time-of-flight detector in CDF-II"
By CDF Collaboration (D. Acosta et al.). Nucl.Instrum.Meth. A518 (2004) 605-608.

61) "The CDF-II time-of-flight detector"
By CDF Collaboration (S. Cabrera et al.). Nucl.Instrum.Meth. A494 (2002) 416-423.

62) "A Time-of-flight detector for CDF"
By CDF Collaboration (C. Grozis et al.). Int.J.Mod.Phys. A16S1C (2001) 1119-1121.

63) "Design and performance tests of the CDF time-of-flight system"
By CDF Collaboration (C. Paus et al.). Nucl.Instrum.Meth. A461 (2001) 579-581.

Mice Experiment: Beam Studies

64) "Proton Contamination Studies in the MICE Muon Beam Line"
By S. Blot, Y.K. Kim, R.R. Fletcher, D. Kaplan, C. Rogers., Conf.Proc. C110904 (2011) 871-873.

65) "The MICE Muon Beam on ISIS and the beam-line instrumentation of the Muon Ionization Cooling Experiment"
By MICE Colaboration (M. Bogomilov et al.). JINST 7 (2012) P05009.

International Linear Collider

66) "ILC Reference Design Report Volume 4 – Detectors"
By ILC Collaboration (Ties Behnke et al.). arXiv:0712.2356 [physics.ins-det].

67) "ILC Reference Design Report: ILC Global Design Effort and World Wide Study"
By ILC Collaboration (James Brau et al.). arXiv:0712.1950 [physics.acc-ph].

68) "International Linear Collider Reference Design Report Volume 2: Physics at the ILC"
By ILC Collaboration (Gerald Aarons et al.). arXiv:0709.1893 [hep-ph].

Strategic Planning and Overview

69) "Fundamental Physics at the Intensity Frontier"
By J.L. Hewett, H. Weerts, R. Brock, J.N. Butler, B.C.K. Casey, J. Collar, A. de Govea, R. Essig et al. arXiv:1205.2671 [hep-ex] (2013).

70) "Fermilab: A plan for discovery"
By Christopher Hill, Craig Hogan, Steve Holmes, Young-Kee Kim, Joseph Lykken, Chris Quigg, Katie Yurkewicz (2011).

71) "Physics with a High Intensity Proton Source at Fermilab: Project X Golden Book"
By Jeffrey Appel, David Asner, Ikaros Bigi, Douglas Bryman, Andrzej Buras, Marcela Carena, Roberto Carosi, Dave Christian et al. (2010)

72) "Fermilab Steering Group Report"
By Eugene Beier, Joel Butler, Sally Dawson, Helen Edwards, Thomas Himel, Stephen Holmes, Young-Kee Kim, Andrew Lankford et al. (2007)

73) "The Coming Revolution in Particle Physics: Report of the Fermilab Long Range Planning Committee"
By Hugh E. Montgomery, (Chairperson), Stephen D. Holmes, (Deputy-Chairperson), Jeff Appel, Joel N. Butler, Marcela S. Carena, Josh Frieman, Steve Geer, Christopher T. Hill et al. (2003)

74) "Tevatron: Present status and future prospects"
By CDF and D0 Collaborations (Young-Kee Kim for the collaboration). Int.J.Mod.Phys. A17 (2002) 3099-3106.

75) "Report of the working group on precision measurements"
By Raymond Brock, Jens Erler, Young-Kee Kim, William J. Marciano, William Ashmanskas, Ulrich Baur, John Ellison, Mark Lancaster et al. hep-ex/0011009.

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By TeV-2000 Study Group Collaboration (D. Amidei et al.).

77) "Physics from TRISTAN"
By Y.K. Kim. In *Cargese 1990, Z0 physics* 201-227.