

Evelyn Jean Thomson

Professional Experience

Associate Professor of Physics, University of Pennsylvania, 2010-present.

Assistant Professor of Physics, University of Pennsylvania, 2004-2010.

Postdoctoral Fellow, The Ohio State University, 1999-2004.

Particle Physics and Astronomy Research Council Fellow, 1999.

Education

Ph.D. Experimental Particle Physics, University of Glasgow, 1998,

Measurements of the W boson mass from semileptonic WW events with the ALEPH detector.

B.Sc.(Hons) First Class, Physics, University of Glasgow, 1995.

Awards

Ira H. Abrams Memorial Award for Distinguished Teaching, School of Arts & Science, 2017.

Alfred P. Sloan Foundation Research Fellowship, 2006.

Outstanding Junior Investigator Award, Department of Energy, United States of America, 2005.

Particle Physics and Astronomy Research Council Fellow, United Kingdom, 1999.

Caledonian Research Foundation Scholarship, Carnegie Trust for The Universities of Scotland, 1995-1998.

Thomson Experimental Physics Prize - University of Glasgow, 1997.

Ede & Ravenscroft Prize - Faculty of Science, University of Glasgow, 1995.

Archibald-McAulay Memorial Prize, Michael Faraday Medal - Physics, 1995.

C. E. Strachan Will Trust Scholarship - Faculty of Science, 1994.

Lang Scholarship, Thomson Experimental Prize - Physics, 1994.

Ford-Forrest Bursary, Lanfine Bursary, Michael Faraday Medal - Physics, 1993.

Ford-Forrest Bursary - Mathematics, 1993.

George Roger Muirhead Prize, Joseph Black Medal - Chemistry, 1992.

Academic dux, Larbert High School, 1990.

Grants

High Energy Physics, Department of Energy, 2010-present (PI Williams). One of four faculty supported by Energy Frontier grant. \$1,930k.

Outstanding Junior Investigator Award, Department of Energy, 2005-09. \$75k.

Alfred P. Sloan Foundation Research Fellowship, 2006. \$45k.

Postdoctoral Advisees (5)

Dr. Jeff Dandoy (Chicago), 2016-present, ATLAS R-parity-violating scalar top search.

Dr. James Degenhardt (Michigan), 2007-2013, ATLAS TRT and W' searches (Ford Capital).

Dr. Saša Fratina (Ljubljana), 2007-2012, ATLAS TRT and SUSY dileptons.

Dr. Chris Neu (Ohio State), 2006-2008, CDF $W + b$ jets (tenured at University of Virginia).

Dr. Aafke Kraan (Copenhagen), 2005-2006, CDF W boson helicity (Marie Curie EU fellow, INFN Pisa).

Ph.D. Advisees (7)

Leigh Schaefer (2014-present), Ian Dyckes (2015-present), Lucas Flores (2015-present).

Brett Jackson, *A search for B-L R-parity-violating scalar top decays in $\sqrt{s} = 8$ TeV pp collisions with the ATLAS experiment*, (2015). Dissertation available from ProQuest. Paper AAI3722828.

<http://repository.upenn.edu/dissertations/AAI3722828>.

Elizabeth Hines, *Search for weakly-produced supersymmetry in same-sign di-lepton final state at $\sqrt{s} = 8$ TeV with the ATLAS detector*, (2015). Dissertation available from ProQuest. Paper AAI3722744.

<http://repository.upenn.edu/dissertations/AAI3722744>.

Dominick Olivito, *Search for anomalous production of prompt like-sign lepton pairs at $\sqrt{s} = 7$ TeV with the ATLAS detector*, (2012). Dissertation available from ProQuest. Paper AAI3551535.

<http://repository.upenn.edu/dissertations/AAI3551535>.

Justin Keung, *Search for the production of the Standard Model Z^0 boson in association with W^\pm boson in proton anti-proton collisions at 1.96 TeV center of mass energy*, (2010). Dissertation available from ProQuest. Paper AAI3431134.

<http://repository.upenn.edu/dissertations/AAI3431134>.

Professional and Service Activities

ATLAS US speakers committee, chair 2016-present, deputy 2015-16, member 2009-11.

Member of organizing committee for US ATLAS 2017 workshop, ANL.

Co-chair of Exotics at the LHC parallel session for BLV 2017 conference.

Reviewer for *Physics Letter B*, 2016.

US Department of Energy, Office of Science High Energy Physics, including:

Energy Frontier National Lab Comparative Review Panel, 2015,

Early Career Award Panel, 2014, and mail-in reviewer 2016,

Committee of Visitors, 2013.

Co-leader of CDF Top Quark Physics Group, 2004-06.

Co-leader of CDF Top Lepton+Jets Working Group, 2002-04.

Chair of CDF review committee for Run IIb XFT upgrade, 2004-2006.

CDF paper review committees:

2012, W boson helicity combination,

2010, top quark pair production cross-section,

2009, W boson helicity,

2009, top-quark mass in all-hadronic channel,

2004, top-quark production rate in dilepton channel.

Local organizer of high transverse momentum physics parallel sessions at ICHEP, July 2008.

Co-organizer of Top, Higgs, W & Z Physics parallel session at Joint Meeting of Pacific Region Particle Physics Communities, October 2006.

Reviewer for *Nature*, 2003-2004.

Undergraduate Instruction

I have taught introductory physics classes on Classical Mechanics (Physics 140/150) and Electricity and Magnetism (Physics 141/151). These classes are calculus-based, and the students are from both the College of Arts and Sciences and the School of Engineering and Applied Sciences. I also teach an advanced class on experimental particle physics (Physics 522) for seniors and graduate students.

Course	Semester	Students	Instructor Quality (4 maximum)
Physics 522	Spring 2017	10	-
Physics 150	Fall 2016	74	3.42
Physics 140	Fall 2016	28	3.30
Physics 151	Spring 2016	99	3.35
Physics 141	Spring 2016	43	3.29
Physics 150	Fall 2015	79	3.31
Physics 140	Fall 2015	25	3.21
Physics 522	Spring 2015	22	2.86
Physics 150	Fall 2014	78	3.24
Physics 140	Fall 2014	40	3.30
Physics 151	Spring 2014	84	3.20
Physics 141	Spring 2014	26	3.00
Physics 150	Fall 2013	86	3.21
Physics 140	Fall 2013	26	3.13
Physics 151	Spring 2013 (9am)	52	3.36
Physics 141	Spring 2013 (9am)	6	3.60
Physics 150	Fall 2012	75	3.29
Physics 140	Fall 2012	16	3.33
Physics 151	Spring 2011	88	3.04
Physics 141	Spring 2011	39	3.03
Physics 150	Fall 2010	66	3.39
Physics 140	Fall 2010	31	3.24
Physics 150	Fall 2009	72	3.31
Physics 140	Fall 2009	29	3.62
Physics 151	Spring 2009	87	3.42
Physics 141	Spring 2009	35	3.27
Physics 150	Fall 2008	60	3.54
Physics 140	Fall 2008	20	3.59
Physics 151	Spring 2008	37	3.52
Physics 141	Spring 2008	14	3.80
Physics 151	Spring 2007	16	3.22
Physics 141	Spring 2007	4	3.00
Physics 150	Fall 2006	54	2.43
Physics 140	Fall 2006	25	2.10
Physics 151	Spring 2006	26	2.57
Physics 141	Spring 2006	8	3.40
Physics 150	Fall 2005	57	2.39
Physics 140	Fall 2005	25	2.16
Physics 151	Spring 2005	42	1.12

Undergraduate Research

I have supervised several undergraduate students for summer research, with a focus on transferable coding and data analysis skills. In summer 2017, I supervised two Penn sophomores Mr. Jacob Rhode and Ms. Aleksandra Kusiak on a coding project to evaluate the feasibility of several possible searches for new particles. In summer 2016, I supervised a local high school senior Ms. Seyoung Kim on data analysis from a test-stand for ATLAS electronics. I also supervised Ms. Sandy Tang, Ms. Kathryn Khaw, Mr. Andrew Madigan, Mr. Aakash Parikh, Mr. Brailinson Disla (all Penn freshmen), on various coding projects related to ATLAS data analysis and the electronics test-stand.

Activities at University of Pennsylvania

- **Curriculum Committee**, School of Arts and Sciences, 2015-present.
- **Committee on Undergraduate Academic Standing**, School of Arts and Sciences, 2013-2014, 2014-2015 (chair).
- **Committee on Undergraduate Instruction**, Department of Physics and Astronomy, 2013-2014.
- **Graduate thesis committee member** for Penn Physics & Astronomy graduate students Rachel Cane Wolf (2017), Prashant Subbarao (2016), Andy Mastbaum (2016), Bade Uzgil (2015), Alan Meert (2015), Chris Lester (2014), Jon Stahlman (2014), Melinda Gildner (2014), Ryan Reece (2013), Elio Angile (2013), Lauren Willis (2013), Ryan Reece (2013), Michael Hance (2011), Siying Wang (2011), Andre Brown (2009), Tsz Yan Lam (2009), Yan-Jun Tu (2008), and Rutgers University graduate student Jared Yamaoka (2007).
- **Graduate Admissions Committee**, Department of Physics and Astronomy, 2015-16, 2014-2015, 2008-2009, 2007-2008, 2005-2006, 2004-2005. Reviewed applications and led recruitment of 20 graduate students to date for the seven faculty in experimental particle physics at Penn. This was particularly critical as only four graduate students had been successfully recruited for experimental particle physics during the four years prior to my arrival at Penn.
 - Mr. Justin Keung (Thomson, Lockyer), Ms. Elisabetta Pianori (Lockyer), Ms. Anna Grassellino (Lockyer) recruited for September 2005 incoming class.
 - Mr. John Alison (Kroll), Mr. Dominick Olivito (Thomson), Mr. Ryan Reece (Williams) recruited for September 2006 incoming class.
 - Mr. Richie Bonventre (Klein), Mr. Brett Jackson (Thomson), Mr. Chris Lester (Kroll), Mr. Jon Stahlman (Williams) recruited for September 2008 incoming class.
 - Mr. Thomas Caldwell (Klein), Mr. Andy Mastbaum (Klein), Mr. Doug Schaefer (Lipeles), Mr. Rami Vanguri (Lipeles) recruited for September 2009 incoming class.
 - Ms. Rachael Creager (Kroll), Mr. Christian Herwig (Lipeles), Ms. Elodie Resseguie (Lipeles) recruited for September 2014 incoming class.
 - Mr. David Rivera (Klein), Mr. Ian Dyckes (Thomson), Mr. Lucas Flores (Thomson) recruited for September 2015 incoming class.
- **Experimental Particle Physics Seminar series, organizer 2005-present**. Invite speakers to Penn to contribute to good learning environment for graduate students. Seminars typically occur every two weeks during academic year.
http://www.hep.upenn.edu/HEP_website_09/Talks/Seminars/

- Faculty Search Committee for Experimental Condensed Matter Physics 2016-17.
- Teaching panel member, New Faculty Orientation, SAS, 2016.
- Faculty Search Committee for Experimental Particle Physics 2014-15, 2007-08.
- Colloquium Committee member, Department of Physics and Astronomy, 2014-15, 2010-11, 2005-06.
- Discussion leader, Freshmen Penn Reading Project, 2015, 2013, 2010, 2008, 2006, 2005.
- 60-second lecture, Penn School of Arts and Sciences, April 1 2009:
<https://www.sas.upenn.edu/particles-from-proton-collisions-60-seconds>
- Fund to Encourage Women event, panel member, “Female Scientists in Academia”, March 2009.
- Presentation at launch of Center for Particle Cosmology, February 24 2009.
- Penn Physics club presentation, November 2008.
- Penn Proseminar, New Student Orientation 2008.
- Penn Career Services, panel member, “Preparing for/Making the Most of Your First Year in a New Faculty Position”, April 2006.

Conference Presentations

- Ms. Schaefer, *A Search for B-L R-Parity Violating scalar top decays in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS experiment*, DPF 2017, Fermilab, Illinois, August 2017.
- Dr. Dandoy, *Jet Calibration in the ATLAS experiment*, DPF 2017, Fermilab, Illinois, August 2017.
- *Exotics at the LHC*, invited plenary talk at BLV 2017, Cleveland, Ohio, May 2017.
- Dr. Dandoy, *Measurements of inclusive jet and dijet production and kt splitting scales with the ATLAS detector*, DIS 2017, Birmingham, UK, April 2017.
- Dr. Dandoy, *The ATLAS Tile Calorimeter, its performance with 13 TeV proton-proton collisions, and its upgrades for the high luminosity LHC*, DIS 2017, Birmingham, UK, April 2017.
- *Search for direct scalar top production with R-Parity Violating decay*, DPF 2015, Ann Arbor, Michigan, August 2015.
- Mr. Jackson, *Searches for R-Parity violating SUSY*, SUSY 2015, Lake Tahoe, California, August 2015.
- *Top pair inclusive and differential cross sections*, Top at Twenty conference, Fermilab, Batavia, Illinois, April 2015.
- Ms. Hines, *Search for weakly-produced supersymmetric particles in the multi-lepton and missing energy channel at the ATLAS experiment*, APS April Meeting, Savannah, Georgia, April 2014.
- Dr. Fratina, *ATLAS Status*, Top 2011, Spain, September 2011.

- Ms. Hines, *Performance of Particle Identification with the ATLAS Transition Radiation Tracker*, APS-DPF-2011, Providence, Rhode Island, August 2011.
- Mr. Olivito, *Search for high mass dilepton resonances in pp collisions at $\sqrt{s} = 7\text{ TeV}$ with the ATLAS experiment*, APS-DPF-2011, Providence, Rhode Island, August 2011.
- Dr. Degenhardt, *Search for High-Mass States with Lepton Plus Missing Transverse Energy Using the ATLAS Detector at Center of Mass Energy of 7 TeV*, APS-DPF-2011, Providence, Rhode Island, August 2011.
- Mr. Olivito, *Searches for new heavy gauge bosons in 2011 ATLAS data*, PLHC, Italy, June 2011.
- Dr. Degenhardt, *Performance of the ATLAS Transition Radiation Tracker with Cosmic Rays and First High Energy Collisions at LHC*, IEEE2010, Knoxville, Tennessee, October 2010.
- Mr. Olivito, *Performance of the ATLAS Transition Radiation Tracker read-out with cosmic rays and first high energy collisions at the LHC*, TWEPP10, Germany, September 2010.
- *Measurement of b-jet production in association with a W boson*, Northwest Terascale Research Workshop on $W + b$ -quark physics at the LHC, University of Oregon, September 2009.
- Dr. Degenhardt: *Commissioning of the Inner Detector*, ATLAS Physics Workshop of the Americas, New York University, New York, August 2009.
- *Commissioning of the Transition Radiation Tracker*, ATLAS Physics Workshop of the Americas, Simon Fraser University, Canada, June 2008.
- Dr. Neu: *Experimental studies of W/Z+jets and W/Z+Heavy Flavor at the Tevatron*, Hadron Collider Physics, Galena, Illinois, May 2008.
- Dr. Neu: *W/Z+Jets and W/Z+heavy flavor production at the Tevatron*, Moriond QCD, Italy, March 2008.
- Dr. Kraan: *Measurements of W helicity in top quark decays at CDF*, CERN EP seminar, Geneva, Switzerland, December 2006.
- Dr. Kraan: *Measurements of top quark properties at CDF*, ICHEP, Moscow, Russia, July 2006.
- *Combination of CDF measurements of top quark pair production rate*, Joint Meeting of Pacific Region Particle Physics Communities, Honolulu, Hawaii, October 2006.
- *Experimental Methods in top quark physics*, invited plenary talk at Top Quark 2006, Coimbra, Portugal, January 2006.
- *Top quark Physics*, invited plenary talk at XVII Particles and Nuclei International Conference, Santa Fe, New Mexico, October 2005.
- *Electroweak and top quark physics*, invited plenary talk at American Physical Society Division of Particles and Fields annual meeting (DPF2004), University of California at Riverside, California, August 2004.

- *Recent Physics Results from CDF and DØ*, invited talk at topical conference at the 31st SLAC Summer Institute on Particle Physics: Cosmic Connection to Particle Physics (SSI 2003), Menlo Park, California, August 2003. Streaming video available from http://www.slac.stanford.edu/econf/C0307282/lec_notes/thomson.html
- *Online Track Processor for the CDF Upgrade*, invited talk at IEEE Nuclear Science Symposium, San Diego, November 2001.
- *New results on interference effects and correlations*, invited talk at International Europhysics Conference on High-Energy Physics (EPS-HEP 99), Tampere, Finland, July 1999.

Colloquia

- Drexel University, December 2015.
- University of California, Santa Cruz, May 2009.
- MIT Laboratory of Nuclear Science, April 2009.
- Villanova University, November 2008.
- Drexel University, October 2008.
- Bryn Mawr College, March 2008.
- Johns Hopkins University, October 2006.
- University of Maryland, April 2006.
- University of Kentucky, November 2004.

Seminars

- University of Delaware, May 2017.
- University of Toronto, October 2009.
- University of California, San Diego, May 2009.
- Harvard University, April 2009.
- University of Washington, January 2006.
- California Institute of Technology, March 2004.
- University of California at Davis, March 2004.
- Fermi National Accelerator Laboratory, March 2004, September 1999.
- Ohio State University, February 2004, September 1999.
- University of Pennsylvania, February 2004, April 2003.

- Michigan State University, November 2003, September 1999.
- Brookhaven National Laboratory, September 1999.
- Boston University, September 1999.
- Purdue University, September 1999.
- Lawrence Berkeley National Laboratory, May 1999.

Schools

SLAC Summer Institute, “Cosmic Connections”, July 2003.

CERN-JINR European School of High-Energy Physics, May 1997, Denmark. Poster: “Measuring M_W ”.

RAL School for Young High-Energy Physicists, September 1996, United Kingdom.

Secondary education: Larbert High School, Larbert, Stirlingshire, UK. August 1985 to May 1991.

Academic dux (valedictorian) and prefect.

3 Certificates of Sixth Year Studies in Chemistry (A), Physics (B) and Mathematics II (B).

7 Highers in Biology (A), Chemistry (A), English (A), Geography (A), Latin (B), Mathematics (A) and Physics (A).

8 O-grades in Arithmetic (1), Chemistry (1), English (1), French (2), Geography (1), Latin (1), Mathematics (1) and Physics (1).

Publications in Refereed Journals

I have listed publications where my group is one of the principal authors (**P**) or made important contributions (**I**). A full list of ALEPH, CDF, and ATLAS publications where I am listed as an author is available on request. The ATLAS author list (typically 12 pages) is not included in the ATLAS paper page counts below.

References

- [1] (**I**) *Search for the electroweak production of supersymmetric particles in $\sqrt{s}=8$ TeV pp collisions with the ATLAS detector*, G. Aad *et al.* [ATLAS Collaboration], Phys. Rev. D **93**, 052002, arXiv:1509.07152, 37 pages.
- [2] (**P**) *Combination of measurements of the top-quark pair production cross section from the Tevatron Collider*, T. Aaltonen *et al.* [CDF Collaboration, D0 Collaboration], Phys. Rev. D **89**, 072001 (2014), 17 pages.
- [3] (**P**) *Search for doubly-charged Higgs bosons in like-sign dilepton final states at $\sqrt{s} = 7$ TeV with the ATLAS detector*, G. Aad *et al.* [ATLAS Collaboration], Eur. Phys. J. C **72**, 2244 (2012), 5 pages.
- [4] (**P**) *Search for anomalous production of prompt like-sign lepton pairs at $\sqrt{s} = 7$ TeV with the ATLAS detector*, G. Aad *et al.* [ATLAS Collaboration], JHEP **1212**, 007 (2012), 21 pages.
- [5] (**P**) *ATLAS search for a heavy gauge boson decaying to a charged lepton and a neutrino in pp collisions at $\sqrt{s} = 7$ TeV*, G. Aad *et al.* [ATLAS Collaboration], Eur. Phys. J. C **72**, 2241 (2012) 11 pages.
- [6] (**P**) *Search for a heavy gauge boson decaying to a charged lepton and a neutrino in 1 fb^{-1} of pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector*, G. Aad *et al.* [ATLAS Collaboration], Phys. Lett. B **705** (2011) 28-46, 7 pages.
- [7] (**P**) *Search for high mass dilepton resonances in pp collisions at $\sqrt{s} = 7$ TeV using the ATLAS detector*, G. Aad *et al.* [ATLAS Collaboration], Phys. Lett. B **700** (2011) 163-180, 6 pages.
- [8] (**P**) *First measurement of the b-jet production cross section in events with a W boson in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV*, The CDF Collaboration, T. Aaltonen *et al.*, Phys. Rev. Lett. **104**, 131801 (2010), 7 pages.
- [9] (**P**) *Top quark properties and interactions*, E. J. Thomson and R. Demina, Annual Review of Nuclear and Particle Science, Vol. 58: 125-146 (2008), 22 pages.
- [10] (**P**) *Search for $V + A$ current in top quark decay in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. Lett. **98**, 072001 (2007), 7 pages.
- [11] (**I**) *Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV using lepton + jets events with jet probability b-tagging*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. D **74**, 072006 (2006), 38 pages.
- [12] (**I**) *Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV in the all hadronic decay mode*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. D **74**, 072005 (2006), 9 pages.

- [13] **(I)** *Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. Lett. **97**, 082004 (2006), 7 pages.
- [14] **(I)** *Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV using missing $E_T + jets$ events with secondary vertex b -tagging*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. Lett. **96**, 202002 (2006), 7 pages.
- [15] **(I)** *Measurement of the top quark mass using template methods on dilepton events in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. D **73**, 112006 (2006), 23 pages.
- [16] **(I)** *Measurement of the top quark mass with the dynamical likelihood method using lepton plus jets events with b -tags in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. D **73**, 092002 (2006), 26 pages.
- [17] **(I)** *Search for anomalous semileptonic decay of heavy flavor hadrons produced in association with a W boson at CDF II*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. D **73**, 051101 (2006), 8 pages.
- [18] **(I)** *Top quark mass measurement from dilepton events at CDF II*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. Lett. **96**, 152002 (2006), 7 pages.
- [19] **(I)** *Measurement of the helicity of W bosons in top quark decays*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. D **73**, 111103 (2006), 7 pages.
- [20] **(I)** *Top quark mass measurement using the template method in the lepton + jets channel at CDF II*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. D **73**, 032003 (2006), 35 pages.
- [21] **(I)** *Precision top quark mass measurement in the lepton + jets topology in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. Lett. **96**, 022004 (2006), 7 pages.
- [22] **(I)** *A search for $t \rightarrow \tau\nu q$ in $t\bar{t}$ production*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Lett. B **639**, 172 (2006), 7 pages.
- [23] **(I)** *Search for charged Higgs bosons from top quark decays in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV*, The CDF Collaboration, A. Abulencia *et al.*, Phys. Rev. Lett. **96**, 042003 (2006), 7 pages.
- [24] **(P)** *Measurement of the cross section for $t\bar{t}$ production in $p\bar{p}$ collisions using the kinematics of lepton + jets events*, The CDF Collaboration, D. Acosta *et al.*, Phys. Rev. D **72**, 052003 (2005), 27 pages.
- [25] **(I)** *Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV using lepton plus jets events with semileptonic B decays to muons*, The CDF Collaboration, D. Acosta *et al.*, Phys. Rev. D **72** 032002 (2005), 20 pages.
- [26] **(I)** *Measurement of $B(t \rightarrow Wb)/B(t \rightarrow Wq)$ at the Collider Detector at Fermilab*, The CDF Collaboration, D. Acosta *et al.*, Phys. Rev. Lett. **95**, 102002 (2005), 7 pages.
- [27] **(I)** *Search for anomalous kinematics in $t\bar{t}$ dilepton events at CDF II*, The CDF Collaboration, D. Acosta *et al.*, Phys. Rev. Lett. **95**, 022001 (2005), 7 pages.
- [28] **(I)** *Search for electroweak single top quark production in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV*, The CDF Collaboration, D. Acosta *et al.*, Phys. Rev. D **71**, 012005 (2005), 7 pages.

- [29] **(I)** *Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV using lepton + jets events with secondary vertex b -tagging*, The CDF Collaboration, D. Acosta *et al.*, Phys. Rev. D **71**, 052003 (2005), 28 pages.
- [30] **(I)** *Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV using kinematic fitting of b -tagged Lepton + Jet Events*, D. Acosta *et al.*, The CDF Collaboration, Phys. Rev. D **71**, 072005 (2005), 20 pages.
- [31] **(I)** *Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV using dilepton events*, The CDF Collaboration, D. Acosta *et al.*, Phys. Rev. Lett. **93**, 142001 (2004), 7 pages.
- [32] **(I)** *Optimized search for single top quark production at the Fermilab Tevatron*, The CDF Collaboration, D. Acosta *et al.*, Phys. Rev. D **69**, 052003 (2004), 9 pages.
- [33] **(I)** *Measurement of the W mass and width in e^+e^- collisions at 189 GeV*, The ALEPH Collaboration, R. Barate *et al.*, Eur. Phys. J. C **17**, 241-261 (2000), 21 pages.
- [34] **(P)** *Measurement of the W mass in e^+e^- collisions at 183 GeV*, The ALEPH Collaboration, R. Barate *et al.*, Phys. Lett. B **453**, 121-137 (1999), 17 pages.
- [35] **(P)** *Measurement of the W mass by direct reconstruction in e^+e^- collisions at 172 GeV*, The ALEPH Collaboration, R. Barate *et al.*, Phys. Lett. B **422**, 384-398 (1998), 15 pages.

Conference Publications

- [36] **(P)** *A search for B - L R -Parity-violating scalar top decays in $\sqrt{s} = 13$ TeV pp collisions with the ATLAS experiment*, ATLAS Collaboration, ATLAS-CONF-2017-036, May 2017, <https://cds.cern.ch/record/2265808>, 22 pages.
- [37] **(P)** *A search for B - L R -Parity-violating scalar top decays in $\sqrt{s} = 8$ TeV pp collisions with the ATLAS experiment*, ATLAS Collaboration, ATLAS-CONF-2015-015, March 2015, <http://cdsweb.cern.ch/record/2002885>, 19 pages.
- [38] **(P)** *Particle identification performance of the ATLAS Transition Radiation Tracker*, ATLAS Collaboration, ATLAS-CONF-2011-128, September 2011, <http://cdsweb.cern.ch/record/1383793>, 20 pages.
- [39] **(P)** *Calibration of the ATLAS Transition Radiation Tracker*, ATLAS Collaboration, ATLAS-CONF-2011-006, February 2011, <http://cdsweb.cern.ch/record/1330712>, 21 pages.
- [40] **(P)** *Progress in top quark physics*, E. J. Thomson on behalf of the CDF and $D\bar{0}$ Collaborations, in proceedings of PANIC 2005, Santa Fe, New Mexico, October 2005. AIP Conf. Proc. **842**, 565 (2006), arXiv:hep-ex/0602024], 13 pages.
- [41] **(P)** *Recent physics results from CDF and $D\bar{0}$* , E. J. Thomson on behalf of the CDF and $D\bar{0}$ Collaborations, in proceedings of The 31st SLAC Summer Institute on Particle Physics: Cosmic Connection to Particle Physics (SSI 2003), Menlo Park, California, 28 July - 8 August 2003, FERMILAB-CONF-04-023-E, 42 pages.

- [42] **(P)** *Online track processor for the CDF upgrade*, E. J. Thomson *et al.*, presented at IEEE 2001 Nuclear Science Symposium (NSS) and Medical Imaging Conference (MIC), San Diego, California, 4-10 November 2001, IEEE Trans. Nucl. Sci. **49**, 1063-1070 (2002).
- [43] **(P)** *W Mass Measurements At LEP And The Tevatron*, M. Lancaster, R. W. L. Jones and E. Thomson, prepared for UK Phenomenology Workshop on Collider Physics, Durham, England, 19-24 September 1999, J. Phys. G **26**, 616-626 (2000).
- [44] **(P)** *New results on interference effects and correlations*, E. J. Thomson, The ALEPH Collaboration, Proceedings of International Europhysics Conference on High-Energy Physics (EPS-HEP 99), Tampere, Finland, 15-21 July 1999, edited by K. Huitu, H. Kurki-Suonio, J. Maalampi (UK Institute of Physics) 502-504.