

Eva Halkiadakis

Title and Address :

Assistant Professor
Department of Physics & Astronomy
School of Arts and Sciences
136 Frelinghuysen Road
Piscataway, NJ 08854

Contact Info:

Tel: 732-445-5500 ext 1379
Fax: 732-445-4343
evahal@physics.rutgers.edu
<http://www.physics.rutgers.edu/~evahal/>

Education

Highest Earned Degree

Ph.D., Experimental Particle Physics, Rutgers University, 2001

Dissertation

“Measurements of neutral kaon decays to two electron positron pairs,” Rutgers University, Spring 2001,
Academic advisor Sunil Somalwar

Other Earned Degrees, Graduate and Undergraduate

B.S. Physics / B.A. French, Rutgers University, 1995

Linguistic Ability

Mother tongue: English

Fluent: Greek

Competent: French

Employment History

Positions Held

| | |
|-----------------|---|
| 05/2011-ongoing | Fermilab LHC Physics Center (LPC) Senior Fellow |
| 07/2006-ongoing | Rutgers University, Assistant Professor (entered tenure stream) |
| 01/2006-06/2006 | Rutgers University, Assistant Research Professor |
| 07/2001-12/2005 | University of Rochester, Research Associate |

Teaching Experience

2011 | *Rutgers University Spring 2011 and Fall 2006.* First year physics with calculus for science majors.

- Four recitation sections per semester. Lead homework problem solving sessions designed quizzes and proctored exams.

2008-2010 | *Rutgers University Fall 2008, Fall 2009, Fall 2010.* Quantum Mechanics and Atomic Physics.

- Introductory quantum mechanics and atomic physics, including the Schroedinger equation and its solutions for simple potentials, the hydrogen atom, and complex atoms and molecules.
- For physics majors and minors.

- 2007-2009 | *Rutgers University Spring 2007, Spring 2008, Spring 2009.* Physics of Modern Devices.
- Physical laws and principles underlying modern devices and processes.
 - For physics majors and minors.
- 1999-2000 | *Rutgers University Fall 1999 and Spring 2000.* First year physics with calculus for science majors.
- Two recitation sections per semester. Lead homework problem solving sessions designed quizzes and proctored exams.
- 1995 | *Rutgers University Fall 1995.* First year physics with calculus for science majors.
- Homework problem solving session.

Research Interests

Description of Research and Scholarly or Creative Objectives

CMS (Compact Muon Solenoid), 2001-Present

CDF (Collider Detector at Fermilab), 2000-Present

KTeV (Kaons at the Tevatron), 1994-2003

Honors and Awards

Fellowships

Fermilab LHC Physics Center (LPC) Fellowship, May 2011-May 2012, \$40,000, plus \$20,00 travel funds

Bunting-Cobb Fellowship, From the Douglass Project for Rutgers Women in Math, Science and Engineering, 1999-2000

GAANN Fellowship (Graduate Assistance in Areas of National Need) 1998-1999, 1995-1996

Professional Awards and Honors

2009 | Rutgers SPS Outstanding Teaching Award, April 2009

2008 | NSF CAREER Award, June 2008-Present, \$550,000 (over 5 years)

1995 | Richard T. Weidner Prize, 1995

1995 | Rutgers Physics Dept. Honors Program, 1994-1995

1994 | Sigma Pi Sigma National Physics Honor Society, 1994

1994 | Phi Beta Kappa Society, 1994

1993 | Mary Wheeler Wigner Memorial Scholarship, 1993

1993 | Golden Key National Honor Society, 1993

Conference Presentations, Lectures, Demonstrations

Keynote or Plenary Addresses

- 2011 | *Workshop on Searches for Supersymmetry at the LHC (October 2011, expected), Berkeley, CA.* Presentation Title: "Searches for New Physics at CMS"
- 2011 | *Rutgers University, Physics Colloquium (September 7, 2011, expected), Piscataway, NJ.* Presentation Title: "Particle Physics at the Energy Frontier: From the Tevatron to the LHC"
- 2011 | *Boost 2011 Workshop (May 2011), Princeton, NJ.* Presentation Title: "Search for New Physics in Multijet Final States at CDF"
- 2010 | *22nd Rencontres de Blois (July 2010), Blois, France.* Presentation Title: "Non-SUSY Searches at the Tevatron"
- 2010 | *35th International Conference on High Energy Physics (July 2010), Paris, France.* Presentation Title: "SUSY and RPV SUSY Searches at the Tevatron"
- 2010 | *Boost 2010 Workshop (June 2010), Oxford, UK.* Presentation Title: "Signatures of lepton-jet production at the LHC"
- 2010 | *The University of Utah, Physics Colloquium (April 2010), Salt Lake City, UT.* Presentation Title: "The Startup of the LHC Experiments"
- 2009 | *TASI Summer School (June 2009), Boulder, CO.* Title of Lectures: "Introduction to the LHC Experiments"
- 2009 | *Fermilab Joint Experimental-Theoretical Seminar (May 2009), Batavia, IL* Presentation Title: "Direct measurement of the W boson production charge asymmetry at CDF".
Seminar also given at: *Oxford (Jan 2011), Rutherford Appleton Laboratory (Jan 2011), University of Utah (April 2010), University of Pennsylvania (Oct 2009), University of Maryland (May 2009).*
- 2009 | *XXIII Rencontres de Physique de la Vallee d'Aoste (March 2009), La Thuile, Aosta Valley, Italy.* Presentation Title: "Electroweak Measurements from the Tevatron"
- 2008 | *Aspen 2008 Winter Conference (January 2008), Aspen, CO.* Presentation Title: "Top Quark Properties at the Tevatron"
- 2008 | *LHC New Physics Signatures Workshop (January 2008), University of Michigan.* Presentation Title: "Extracting Hadronic Resonances using Jet Ensembles"
- 2006 | *APS April Meeting (April 2006), Dallas, Texas.* Presentation Title: "Top at Run II and LHC Prospects"
- 2005 | *Rutgers University Physics Colloquium (2005), Piscataway, NJ.* Presentation Title: "An Experimentalist's View of Particle Physics at the Energy Frontier". Colloquium also given in 2005 at: *Kansas State University, University of Colorado*
- 2004 | *32nd International Conference on High Energy Physics (2004), Beijing, China.* Presentation Title: "Asymmetries in W and Z Production at the Tevatron"
- 2003 | *Fermilab Joint Experimental-Theoretical Seminar (2003), Batavia, IL.* Presentation Title: "Recent Results in Electroweak, Exotic and Top Physics from CDF. Seminar also given in 2003 at: *Rutgers University*

Other Invited Addresses

- 2011 | *Texas A&M University, Particle, Astrophysics & Cosmology Seminar (Nov. 2011, expected), College Station, TX.* Presentation Title: "Searches at CDF and CMS (TBD)"
- 2011 | *University of Michigan, High Energy Physics Seminar (Oct. 2011, expected), Ann Arbor, MI.* Presentation Title: "Searches at CDF and CMS (TBD)"
- 2011 | *University of Karlsruhe, High Energy Physics Seminar (July 2011), Karlsruhe, Germany.* Presentation Title: "Searches for Hadronic Resonances at CDF and CMS"
- 2008 | *APS April Meeting (2008), St. Louis, MO.* Presentation Title: "Measurement of the W boson production charge asymmetry at CDF"
- 2007 | *Universitat Autònoma de Barcelona, IFAE Seminar (2007), Barcelona, Spain.* Presentation Title: "Recent Top Quark and Electroweak Measurements from CDF"
- 2005 | *PIXEL International Workshop (September 2005), Bonn, Germany.* Presentation Title: "A Proposed Luminosity Monitor for CMS Based On Small Angle Diamond Pixel Telescopes"
- 2005 | *Weak Interactions and Neutrinos (2005), Delphi, Greece.* Presentation Title: "Measuring the Top Quark Mass at the Tevatron"
- 2005 | *University of California, Irvine, Particle Physics Seminar (2005), Irvine, CA.* Presentation Title: "Precision Electroweak and Top Quark Measurements at the Energy Frontier". Seminar also given in 2005 at: *Johns Hopkins University, Cornell University, University of Minnesota, LBNL, Indiana University*
- 2004 | *University of Washington High Energy Physics Seminar (2004), Seattle, WA.* Presentation Title: "A View of the Top and the Electroweak"
- 2003 | *University of Maryland High Energy Physics Seminar (2003), College Park, MD.* Presentation Title: "A View of the Top and the Electroweak"
- 2001 | *Frontiers in Contemporary Physics - II (2001), Nashville, TN.* Presentation Title: "Recent Results of Leptonic Kaon Decays from KTeV"
- 2000 | *Intersections of Particle and Nuclear Physics Conference (2000), Quebec City, Canada.* Presentation Title: "Rare Kaon Decays at KTeV"
- 1999 | *APS Centennial (1999), Atlanta, GA.* Presentation Title: " $\pi^0 \rightarrow e^+e^-e^+e^-$ and $K_L \rightarrow e^+e^-e^+e^-$ in KTeV"
- 1997 | *New Perspectives (1997), Fermilab, Batavia, IL.* Presentation Title: "Rare Kaon Decays at KTeV"

Other Presentations, Lectures, Demonstrations (TV, Radio)

- 2011 | *Bunting-Cobb Night with Faculty (April 2011), Bunting-Cobb, Douglass Campus.*
- 2010 | *NJ Science Teachers Convention (2010, 2008).* Presentation Title: "Physics at the High Energy Frontier"
- 2009 | *Exploring Science Majors at Rutgers (April 2009), Bunting-Cobb, Douglass Campus.*

2008 *NJN News Report (November 2008), "Rutgers University LHC physics program"*

Service

Research

2012-ongoing | Convener, CMS SUSY Physics Group. There are nine physics analysis groups at CMS each led by two co-conveners for a two year period. I was appointed co-convener of SUSY physics group in September 2011, with the convenership officially starting in 2012, and the overlap period starting immediately.

01/2011-ongoing | Organizer, Aspen Winter Conference, February 2012

2011-ongoing | Analysis Review Committees or ARC (CMS): Committee is appointed to review analysis prior to publication. Committee is also charged with evaluating the scope and contents of the paper, as well as the journal to be submitted.

- ARC, Chair, *Measurement of the t - t bar cross section in the e/μ +jets channel at CMS*, July 2011-Present

2011 | Organizer, Boost 2011 Workshop, Princeton University, May 2011

2011 | Facilitator, Jets Exercises, CMS Data Analysis School at the LPC at Fermilab, January 2011

2010 | External Reviewer, Thesis Defense Committee M. Cooke, Columbia University, September 2010

2009-ongoing | Convener, CMS Exotica Multijets Physics Subgroup. There are nine physics analysis groups at CMS each led by two co-conveners for a two year period. I am co-leader of the sub-group of the CMS Exotica physics group; I was the sole leader of this group for the first five months.

2009 | Convener, Electroweak Session, Europhysics Conference on High Energy Physics, July 2009

2009 | Facilitator, $Z \rightarrow e^+e^-$ Cross Section Exercise, CMS LPC EJTERM at Fermilab, January 2009

2008-ongoing | Reviewer, NSF Panel and Proposal Reviewer: The panels I have served on have, for example, consisted of three experts appointed to evaluate groups involved in the LHC and other experiments. The reviews have been "reverse site visits" of proponents of NSF proposals as well as "site visits" to the university of the group being evaluated. I have also served as a reviewer of proposals, submitting a written report.

2008 | Member, CDF Spokes-person Election Committee 2008

2008 | External Reviewer, Dissertation Committee for Tuula Maki, Helsinki University of Technology, January 2008

2007-ongoing | Referee, Physical Review D

2007 | Convenor, Top and Electroweak Physics Session, Hadron Collider Physics Symposium 2007

2007 | Referee, FIZIKA A & B (Croatian Physical Society)

| | |
|--------------|---|
| 2006-2008 | Convenor, CDF Electroweak Physics Group. There are six physics groups at CDF (QCD, Electroweak, Top, Bottom, Exotics, and Higgs) each led by two co-conveners for a two year period. |
| 2006 | Facilitator, Hadron Collider Physics Summer School 2006 |
| 2006 | Convenor, Top Mass Session, APS April Meeting 2006 |
| 2004-2005 | Convenor, CDF Top Mass Working Group. At CDF at the time, there were sub-working groups within the Top physics group each led by two co-conveners for a two year period. |
| 2003-ongoing | Member, Tevatron Electroweak Working Group, Batavia, IL |
| 2003 | CDF Tour Guide, Lepton Photon 2003 |
| 2002-ongoing | Godparent Committees (CDF): Committee is appointed to review analysis prior to publication. Committee is also charged with evaluating the scope and contents of the paper, as well as the journal to be submitted. <ul style="list-style-type: none"> • God-Parent, <i>Chair, Search for W and Z Bosons plus additional soft leptons</i>, July 2011-Present • God-Parent, <i>Top quark mass measurement using events with missing energy and jets at CDF</i>, April 2011-Present • God-Parent, <i>Measurement of the Top Quark Mass in the Lepton+Jets Channel Using the Lepton Transverse Momentum</i>, December 2009 - January 2011 • God-Parent, <i>Chair, Search for Higgs bosons in two-Higgs-doublet models via decays to tau lepton pairs in 1.96 TeV p-pbar collisions</i>, August 2008 - 2009 • God-Parent, <i>Chair, Search for R-Parity Violating Supersymmetry in the Multilepton Final State</i>, May 2006 - March 2007 • God-Parent, <i>Measurement of the t-tbar Production Cross Section in p-pbar collisions at $\sqrt{s}=1.96$ TeV using Lepton + Jets Events with Jet Probability b-tagging</i>, Oct. 2005 - Oct. 2006 • God-Parent, <i>Measurement of the t-tbar Production Cross Section in p-pbar Collisions at $\sqrt{s}=1.96$ TeV</i>, Oct. 2005 - July 2006 • God-Parent, <i>CDF Run I Measurements of the W Decay Angle Coefficients</i>, 2002 - 2005 |
| 2002-2004 | Convenor, <i>CDF W & Z Cross Section Working Group</i> |
| 2002 | Working Group Leader, CDF Silicon Data Monitoring Working Group |
| 2001-2003 | Convenor, <i>CDF Electron Task Force</i> |

Service to Other Public Bodies

| | |
|--------------|---|
| 2008 | <i>Contributed to TV report on the LHC for local news station NJN (November 2008), "Rutgers University LHC physics program"</i> |
| 2007-ongoing | Participant, <i>Quarknet Program</i> , Summer program with NJ High School Teachers and Students |
| 2006 | Wrote article in "Symmetry": An outreach magazine on particle physics (December 2006) |

Memberships

Membership/Offices Held in Scholarly and Professional Societies

1999-ongoing | Member, American Physical Society, 2011-present, 2008-2009, 2006-2007, 1999-2000

Students Supervised

Master's or Doctoral Students by Type of Supervision

- 2011 | Doctoral - Primary: Claudia Seitz: 2011-Present, "Search for New Hadronic Resonance using Jet Ensembles at CMS" [Primary Advisor]
- 2011 | Doctoral - Primary: Daryl Hare: Fall 2005-Present, "Measurement of top quark properties in the tau+jets channel at CDF" [Primary Advisor]
- 2011 | Master's - Primary: Claudia Seitz (Defended): Fall 2010-2011, "Search for New Hadronic Resonance using Jet Ensembles at CDF". Was in exchange program with the U. of Wurzburg, now in Rutgers Ph.D program. [Primary Advisor]
- 2007 | Doctoral - Committee: Jared Yamaoka (Defended): Spring 2006-Fall 2007, "Measurement of the relative fraction of t \bar{t} events produced via gluon-fusion at CDF," Although I was not Jared Yamaoka's official supervisor, I worked very closely with him. [Secondary Advisor]

Postdoctoral Trainees

- 2011 | Dan Duggan: 2009 - Present
- 2011 | Dean Hidas: 2009 - Present
- 2009 | Shan-Huei Chuang: 2007-2009, Now at the Instituto de Fisica de Cantabria in Spain.

Publications

Significant Publications

- 2011 | **"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], [arXiv:1108.1601](https://arxiv.org/abs/1108.1601), Accepted by Phys. Rev. D Rapid Comm., September 2011, 9 pages.
- 2011 | **"Search for Three-Jet Resonances in pp Collisions at $\sqrt{s} = 7$ TeV,"** S. Chatrchyan *et al.* [CMS Collaboration], [Phys. Rev. Lett. **107**, 101801-1 - 101801-15 \(2011\)](https://arxiv.org/abs/101801-1).
- 2011 | **"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 **06**, 093, 28 pages \(2011\)](https://arxiv.org/abs/1006.093).
- 2011 | **"First Search for Multijet Resonances in $\sqrt{s} = 1.96$ TeV p-pbar Collisions,"** T. Aaltonen *et al.* [CDF Collaboration], [Phys. Rev. Lett. **107**, 042001-1 - 042001-7 \(2011\)](https://arxiv.org/abs/10042001-1).
- 2009 | **"Direct Measurement of the W Production Charge Asymmetry in p-pbar Collisions at $\sqrt{s} = 1.96$ TeV,"** T. Aaltonen *et al.* [CDF Collaboration], [Phys. Rev. Lett. **102**, 181801-1 - 181801-7 \(2009\)](https://arxiv.org/abs/0903181).
- 2009 | **"Measurement of the fraction of t-tbar production via gluon-gluon fusion in p-pbar collisions at $\sqrt{s} = 1.96$ TeV,"** T. Aaltonen *et al.* [CDF Collaboration], [Phys. Rev. D **79**, 031101-1 - 031101-8 \(R\) \(2009\)](https://arxiv.org/abs/09031101-1).

- 2008 **“New analysis technique to measure the W production charge asymmetry at the Fermilab Tevatron,”** A. Bodek, Y. Chung, E. Halkiadakis, B. Y. Han and K. McFarland, [Phys. Rev. D 77, 111301-1 - 111301-5 \(R\) \(2008\)](#).
- 2007 **“Measurements of Inclusive W and Z Cross Sections in p-pbar Collisions at $\sqrt{s}=1.96$ TeV,”** A. Abulencia *et al.* [CDF Collaboration], [J. Phys. G: Nucl. Part. Phys. 2457, 89 pages \(2007\)](#).
- 2005 **“First measurements of inclusive W and Z cross sections from Run II of the Tevatron collider,”** D. Acosta *et al.* [CDF Collaboration], [Phys. Rev. Lett. 94, 091803-1 - 091803-7 \(2005\)](#).
- 2004 **“Measurement of the t-tbar production cross section in p-pbar collisions at $\sqrt{s} = 1.96$ TeV using dilepton events,”** D. Acosta *et al.* [CDF Collaboration], [Phys. Rev. Lett. 93, 142001-1 - 142001-7 \(2004\)](#).
- 2001 **“Measurements of the rare decay $K_L \rightarrow e^+e^-e^+e^-$,”** A. Alavi-Harati *et al.* [KTeV Collaboration], [Phys. Rev. Lett. 86, 5425-5429 \(2001\)](#).

Other Major Publications

- 2011 **“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], arXiv:1106.4775 [hep-ex], Submitted to Phys. Rev. Lett., 2011, 27 pages (*CMS Exotica Multijets Group Convener*)
- 2011 **“Measurement of Dijet Angular Distributions and Search for Quark Compositeness in pp Collisions at $\sqrt{s} = 7$ TeV,”** V. Khachatryan *et al.* [CMS Collaboration], Phys. Rev. Lett. **106**, 201804-1 - 201804-14 (2011). (*CMS Exotica Multijets Group Convener*)
- 2011 **“Measurement of the Top Quark Mass in the Lepton+Jets Channel Using the Lepton Transverse Momentum,”** T. Aaltonen *et al.* [CDF Collaboration], Phys. Lett. **B698**, 371-379 (2011). (*Served as God-Parent*)
- 2011 **“Search for Microscopic Black Hole Signatures at the Large Hadron Collider,”** V. Khachatryan *et al.* [CMS Collaboration], Phys. Lett. **B697**, 434-453 (2011). (*CMS Exotica Multijets Group Convener*)
- 2010 **“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**, 262001-1 - 262001-15 (2010). (*CMS Exotica Multijets Group Convener*)
- 2010 **“Search for Dijet Resonances in 7 TeV pp Collisions at CMS,”** V. Khachatryan *et al.* [CMS Collaboration], Phys. Rev. Lett. **105**, 211801-1 - 211801-24 (2010). (*CMS Exotica Multijets Group Convener*)
- 2009 **“Search for Higgs Bosons Predicted in Two-Higgs-Doublet Models via Decays to Tau Lepton Pairs in 1.96 TeV p-pbar Collisions,”** T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **103**, 201801-1 - 201801-8 (2009). (*Served as God-Parent Chair*)
- 2008 **“First Measurement of ZZ Production in p-pbar Collisions at $\sqrt{s} = 1.96$ TeV,”** T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **100**, 201801-1 - 201801-7 (2008). (*CDF Electroweak Group Convener*)

- 2008 **“A direct Measurement of the W Boson Width in p-pbar Collisions at $\sqrt{s} = 1.96$ TeV,”** T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **100**, 071801-1 - 071801-7 (2008). (*CDF Electroweak Group Convener*)
- 2008 **“First Run II Measurement of the W Boson Mass,”** T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **77**, 112001-1 - 112001-48 (2008). (*CDF Electroweak Group Convener*)
- 2007 **“Limits on Anomalous Triple Gauge Couplings in p-pbar Collisions at $\sqrt{s} = 1.96$ TeV,”** T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. D **76**, 111103-1 - 111103-8 (2007). (*CDF Electroweak Group Convener*)
- 2011 **“Search for Resonances in the Dijet Mass Spectrum from 7 TeV pp Collisions at CMS,”** S. Chatrchyan *et al.* [CMS Collaboration], arXiv:1107.4771 [hep-ex], Accepted by Phys. Lett. B. September 2011, 27 pages (*CMS Exotica Multijets Group Convener*)
- 2007 **“Precise measurement of the top quark mass in the lepton+jets topology at CDF II,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. Lett **99**, 182002-1 - 182002-7 (2007). (*CDF Top Mass Group Convener*)
- 2007 **“First Measurement of the W Boson Mass in Run II of the Tevatron,”** T. Aaltonen *et al.* [CDF Collaboration], Phys. Rev. Lett. **99**, 151801-1 - 151801-7 (2007). (*CDF Electroweak Group Convener*)
- 2007 **“First Measurement of the Ratio of Central-Electron to Forward-Electron W Partial Cross Sections in p-pbar Collisions at $\sqrt{s} = 1.96$ TeV,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. Lett. **98**, 251801-1 - 251801-7 (2007). (*CDF Electroweak Group Convener*)
- 2007 **“Observation of WZ Production,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. Lett. **98**, 161801-1 - 161801-7 (2007). (*CDF Electroweak Group Convener*)
- 2007 **“Measurement of $\sigma(p\text{-}p\text{-bar} \rightarrow Z\text{ Br} (Z \rightarrow 2\tau))$ in p p-bar collisions at $\sqrt{s} = 1.96$ TeV,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. D **75**, 092004-1 - 092004-26 (2007). (*CDF Electroweak Group Convener*)
- 2007 **“Measurement of the Top Quark Mass in p-pbar Collisions at $\sqrt{s} = 1.96$ TeV using the Decay Length Technique,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. D **75**, 071102-1 - 071102-9 (2007). (*CDF Top Mass Group Convener*)
- 2007 **“Search for anomalous production of multi-lepton events in p-pbar collisions at $\sqrt{s} = 1.96$ TeV,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. Lett. **98**, 131804-1 - 131804-7 (2007). (*Served as God-Parent Chair*)
- 2006 **“Top quark mass measurement from dilepton events at CDF II with the matrix-element method,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. D **74**, 032009-1 – 032009-20 (2006). (*CDF Top Mass Group Convener*)
- 2006 **“Measurement of the t-tbar Production Cross Section in p-pbar Collisions at $\sqrt{s} = 1.96$ TeV,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. Lett. **97**, 082004-1 - 082004-7 (2006). (*Served as God-Parent*)

- 2006 **“Measurement of the t-tbar Production Cross Section in p-pbar collisions at $\sqrt{s} = 1.96$ TeV using Lepton + Jets Events with Jet Probability b-tagging,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. D **74**, 072006-1 - 072006-38 (2006). (*Served as God-Parent*)
- 2006 **“Top quark mass measurement from dilepton events at CDF II,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. Lett. **96**, 152002-1 – 152002-7 (2006). (*CDF Top Mass Group Convener*)
- 2006 **“Measurement of the top quark mass using template methods on dilepton events in proton antiproton collisions at $\sqrt{s} = 1.96$ TeV,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. D **73**, 112006-1 – 112006-23 (2006). (*CDF Top Mass Group Convener*)
- 2006 **“Measurement of the top quark mass with the dynamical likelihood method using lepton plus jets events with b-tags in p-pbar collisions at $\sqrt{s} = 1.96$ TeV,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. D **73**, 092002-1 - 092002-26 (2006). (*CDF Top Mass Group Convener*)
- 2006 **“Precision top quark mass measurement in the lepton + jets topology in p-pbar collisions at $\sqrt{s} = 1.96$ TeV,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. Lett. **96**, 022004-1 – 022004-7 (2006). (*CDF Top Mass Group Convener*)
- 2006 **“Top quark mass measurement using the template method in the lepton + jets channel at CDF II,”** A. Abulencia *et al.* [CDF Collaboration], Phys. Rev. D **73**, 032003-1 – 032003-35 (2006). (*CDF Top Mass Group Convener*)
- 2006 **“Measurement of the azimuthal angle distribution of leptons from W boson decays as a function of the W transverse momentum in p-pbar collisions at $\sqrt{s} = 1.8$ TeV,”** D. E. Acosta *et al.* [CDF Collaboration], Phys. Rev. D **73**, 052002-1 – 052002-29 (2006). (*Served as God-Parent*)
- 2005 **“Measurement of the forward-backward charge asymmetry of electron positron pairs in p-pbar collisions at $\sqrt{s} = 1.96$ TeV,”** D. E. Acosta *et al.* [CDF Collaboration], Phys. Rev. D **71**, 052002-1 – 052002-30 (2005).
- 2004 **“Measurement of the polar-angle distribution of leptons from W boson decay as a function of the W transverse momentum in p-pbar collisions at $\sqrt{s} = 1.8$ TeV,”** D. E. Acosta *et al.* [CDF Collaboration], Phys. Rev. D **70**, 032004-1 – 032004-21 (2004). (*Served as God-Parent*)
- 2004 **“Combination of CDF and D0 results on W boson mass and width,”** V. M. Abazov *et al.* [CDF Collaboration and D0 Collaboration], Phys. Rev. D **70**, 092008-1 – 092008-17 (2004).
- 2004 **“Measurements of Direct CP Violation, CPT Symmetry, and Other Parameters in the Neutral Kaon System,”** A. Alavi-Harati *et al.* [KTeV Collaboration], Phys. Rev. D **67**, 012005-1 – 012005-33 (2003). [Erratum-*ibid.* D **70**, 079904 (2004).]
- 2001 **“Branching Ratio Measurement of the decay $K_L \rightarrow e^+ e^- \mu^+ \mu^-$,”** A. Alavi-Harati *et al.* [KTeV Collaboration], Phys. Rev. Lett. **87**, 111802-1 – 111802-5 (2001).

- 2011 | **"Physics of the Large and the Small: Introduction to the LHC experiments,"** E. Halkiadakis, [arXiv:1004.5564](https://arxiv.org/abs/1004.5564), 2010, 32 pages, Published in [World Scientific, ISBN: 9814327174 \(2011\)](https://www.worldscientific.com/doi/10.1142/9789814327174). *Proceedings for TASI 2009 Summer School.*
- 2009 | **"Electroweak measurements from the Tevatron,"** E. Halkiadakis [CDF and D0 Collaborations], *Il Nuovo Cimento C* **32**, 5-6 (2009). *Conference proceedings for "Les Rencontres de Physique de la Vallée d'Aoste", La Thuile 2009*
- 2006 | **"A proposed luminosity monitor for CMS based on small angle diamond pixel telescopes,"** E. Halkiadakis, *Nucl. Instrum. Meth. A* **565**, 284-289 (2006). *Prepared for International Workshop on Semiconductor Pixel Detectors for Particles and Imaging, Bonn, Germany, 5-8 Sep 2005.*
- 2006 | **"Asymmetries in W^\pm and Z^0/γ^* production at the Tevatron,"** E. Halkiadakis [CDF and D0 Collaborations], FERMILAB-CONF-04-385-E (2004), 4 pages. *Prepared for 32nd International Conference on High-Energy Physics (ICHEP 04), Beijing, China, 16-22 Aug 2004. Published in Beijing 2004, ICHEP 2004, vol. 1, 499-502.*
- 2002 | **"Neutral meson decays to four leptons in KTeV,"** E. Halkiadakis, *AIP Conf. Proc.* **549**, 624-627 (2002). *Prepared for 7th Conference on Intersections Between Particle and Nuclear Physics (CIPANP 2000), Quebec City, Quebec, Canada, 22-28 May 2000.*