

List of Publications

Selected Publications:

1. Jet energy scale determination in the D0 Experiment, Nucl. Instrum. Meth. A 763:442 (2014).
2. A trio of gamma-ray burst supernovae: GRB 120729A, GRB 130215A/SN 2013ez, and GRB 130831/SN 2013fu, Astron. & Astroph., 568:A19 (2014).
3. Electron and Photon Identification in the D0 Experiment, Abazov et al., Nucl. Instrum. Meth. A 750:78 (2014).
4. Higgs Working Group Report of the Snowmass 2013 Community Planning Study, S. Dawson et al., in "Planning the Future of U.S. Particle Physics," FERMILAB-CONF-13-648, Chapter 3, Subgroup Report 18, arXiv:1310.8361 (2013).
5. Analysis of top-antitop Higgs Events at $\sqrt{s}=14$ TeV with $H \rightarrow WW$, P. Onyisi, R. Kehoe et al., Snowmass 2013 Community Contributed Paper 79, arXiv:1307.7280 (2013).
6. Evidence for the spin 0 nature of the Higgs boson using ATLAS data, Aad et al., Phys. Lett. B 726:120 (2013).
7. Measurement of the Higgs boson production and couplings in diboson final states with the ATLAS detector at the LHC, Aad et al., Phys. Lett. B 726:88 (2013).
8. Measurement of WW production in pp collisions at $\sqrt{s}=7$ TeV with the ATLAS detector and limits on anomalous WWZ and $WW\gamma$ couplings, Phys. Rev. D 87:112001, arXiv:1210.2979 (2013).
9. A Particle Consistent with the Higgs Boson Observed with the ATLAS Detector at the Large Hadron Collider, Science 338:1576 (2012).
10. Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC. G. Aad et al., Phys. Lett. B 716:1 (2012).
11. Observation of an Excess of Events in the Search for the Standard Model Higgs Boson in the $H \rightarrow \gamma\gamma$ Channel with the ATLAS Detector, Aad, et al., ATLAS-CONF-2012-098, Jul. 17 (2012).
12. Combination of Top Quark Mass Measurements from the Tevatron Collider, D0+CDF Collabs., Phys. Rev. D 86:092003 (2012).
13. Measurement of the Top Quark Mass in ppbar Collisions using Events with Two Leptons, V. Abazov et al. (D0 Collab.), Phys. Rev. D Rapid Comm. 86:051103, arXiv:1201.5172 (2012).
14. Search for Extra Dimensions using Diphoton Events in 7 TeV proton-proton collisions with the ATLAS detector, ATLAS Collab.. Phys. Lett. B, 710:538 (2012).
15. Performance of the ATLAS Trigger System in 2010, ATLAS Collab., Eur. Phys. J. C 72:1849 (2012).
16. Jet Energy Scale and its Systematic Uncertainty in pp Collisions at $\sqrt{s}=7$ TeV in ATLAS 2010 Data, Aad, et al., ATLAS-CONF-2011-032 (2011).
17. Search for Diphoton Events with Large Missing Transverse Energy in 7 TeV Proton-Proton Collisions with the ATLAS Detector, Phys. Rev. Lett. 106:121803 (2011).
18. Measurement of the Top Quark Mass in emu Final States with Neutrino Weighting in Run II at D0, D0-CONF-6104 (2010).
19. Measurement of the Top Quark Mass in Final States with Two Leptons, V. Abazov et al. (D0 Collab.) Phys. Rev. D 80,092006, arXiv:0904.3195 (2009).
20. Reconstruction and Identification of Photons, Chapter of "Expected Performance of the ATLAS experiment: detector, trigger and physics, v.1", Aad et al., arXiv:0901.0512, CERN-OPEN-2008-020 (2009).
21. Review of Top Quark Physics Results, R. Kehoe, M. Narain, and A. Kumar, Int. Journ. Of Mod. Physics A Vol. 23, Nos. 3&4, 353-470 (2008).
22. The ATLAS Experiment at the CERN Large Hadron Collider, ATLAS Collab., J. Instrum. 3:S08003 (2008).
23. Measurement of the $t\bar{t}$ production cross section in proton-antiproton collisions using dilepton events, V. Abazov, et al. (D0 Collab.) Phys. Rev. D 76, 052006 (2007).

24. Combined D0 Measurements Constraining CP-violating Phase and Width Difference in the B^0_s System, V. Abazov, et al. (D0 Collab.), Phys. Rev. D {76}, 057101 (2007).
25. Measurement of the top quark mass in the dilepton channel, V. Abazov, et al. (D0 Collab.), Phys. Lett. B. 655, 7 (2007).
26. Early-time Observations of the GRB 050319 Optical Transient, R. Quimby et al., Astrophys. J. 640:402 (2006).
27. Measurement of the $t\bar{t}$ production cross section in ppbar collisions at $\sqrt{s}=1.96$ TeV in dilepton final states, V. Abazov, et al., Phys. Lett. B 626:55 (2005).
28. A Search for Untriggered GRB Afterglows with ROTSE-III, E. Rykoff et al., Astrophys. J. 631:1032 (2005).
29. Northern Sky Variability Survey (NSVS): Public data release, P. Wozniak et al., Astron. J. 127:2436 (2004).
30. The ROTSE-III Robotic Telescope System, C. Akerlof et al., Pub. Astron. Soc. Pac. Vol. 115, 803:132 (2003).
31. $t\bar{t}$ Production Cross Section in ppbar Collisions at $\sqrt{s}=1.8$ TeV, V. Abazov et al., Phys. Rev. D 67:012004 (2003).
32. An Untriggered Search for Optical Bursts, R. Kehoe et al., Astrophys. J 577:845 (2002).
33. SDSS J124602.54+011318.8: A Highly Luminous Optical Transient at $z=0.385$, D. Vanden Berk et al., Astrophys. J. 576:673 (2002).
34. Observations of the Optical Counterpart to XTE J1118+480 During Outburst by the ROTSE-I Telescope, J. Wren et al., Astrophys. J. Lett. 557:97 (2001).
35. A Search for Early Optical Emission from Short and Long Duration Gamma-ray Bursts, R. Kehoe et al., Astrophys. J. Lett. 554:159 (2001).
36. Rapid Optical Follow-up Observations of SGR Events with ROTSE-I, C. Akerlof et al., Astrophys. J. 542:251 (2000).
37. Prompt Optical Observations of Gamma-ray Bursts, C. Akerlof et al., Astrophys. J. Lett. 532:25 (2000).
38. ROTSE All Sky Surveys for Variable Stars I: Test Fields, C. Akerlof et al., Astron. J. 119:1901 (2000).
39. Prompt Optical Emission from Gamma-ray Bursts, R. Kehoe et al., in Supernovae and Gamma-Ray Bursts: The Greatest Explosions since the Big Bang, ed. M. Livio, N. Panagia & K. Sahu (Cambridge: Cambridge Univ. Press), 47 (2001); arXiv:astro-ph/9909219.
40. Observation of Contemporaneous Optical Radiation from a Gamma-Ray Burst, C. Akerlof, et al., Nature. 398:400 (1999).
41. Determination of the Absolute Jet Energy Scale in the DØ Calorimeters, B. Abbott, et al., Nucl. Instr. and Meth. A424:352 (1999).
42. Coordinated observations of two large leonid meteor fireballs over northern New Mexico, and computer model comparisons, J. Zinn et al., Meteor. & Planet. Sci., Vol. 34, 6:1007 (1999).
43. Observation of the Top Quark, S. Abachi, et al., Phys. Rev. Lett. 74:2632 (1995).

Telegrams and Notices:

1. GRB140423A: ROTSE-III Detection of Optical Counterpart, Ferrante et al., GRB Coord. Network. 16145, Apr 23 (2014).
2. GRB140419A: ROTSE-III Detection of Optical Counterpart, Guver et al., GRB Coord. Network 16120, Apr 19 (2014).
3. SN 2014W, Dhungana et al., Centr. Bur. Astron. Tel. 3819, Mar 10 (2014).
4. GRB140129A: ROTSE-III Detection of Optical Counterpart, Ferrante et al., GRB Coord. Network 15763, Jan 29 (2014).
5. SN 2014J, Dhungana et al., Centr. Bur. Astron. Tel. 3792, Jan 23 (2014).
6. GRB140114A: ROTSE-III Optical limits, Guver et al., GRB Coord. Network 15740, Jan 15 (2014).
7. Swift Trigger 575905: ROTSE-III Optical limits, Ferrante et al., GRB Coord. Network 15387, Oct 26 (2013).
8. SN 2013ej, Dhungana et al., Centr. Bur. Astron. Tel. 3609, Aug 1 (2013).

9. SN 2013dz, Dhungana et al., Centr. Bur. Astron. Tel. 3589, Jul 16 (2013).
10. GRB130420A: ROTSE-III Data analysis, Ferrante et al. GRB Coord. Network 14440, Apr 24 (2013); GRB130420A: ROTSE-III Detection of Optical Counterpart, Guver et al., GRB Coord. Network 14407, Apr 20 (2013)
11. SN 2013ag, Dhungana et al., Centr. Bur. Astron. Tel. 3428, Mar 5 (2013).
12. GRB130215A: ROTSE-III data analysis, Zheng et al, GRB Coord. Network 14208, Feb 15 (2013); GRB130215: ROTSE-III Detection of Optical Counterpart, Zheng et al., GRB Coord. Network 14205, Feb 15 (2013).
13. SN 2013X, Ferrante et al., Centr. Bur. Astron. Tel. 3413, Feb 6 (2013).
14. SN 2012ha, Ferrante et al., Centr. Bur. Astron. Tel. 3319, Nov 29 (2012).
15. GRB121117A: ROTSE-III Optical limits, Zheng et al., GRB Coord Network 13969, Nov 17 (2012).
16. Nova in M33, Zheng et al., Centr. Bur. Astron. Tel. 3250, Oct 9 (2012).
17. SN 2012fb, Zheng et al., Centr. Bur. Astron. Tel. 3237, Sep 24 (2012).
18. GRB000201 Optical observations, Kehoe et al., GRB Coord. Network 536, Feb 2 (2000)
19. GRB990123: early optical counterpart detection, Akerlof et al., GRB Coord. Network 205, Jan 23 (1999)

Presentations at Conferences and Institutions

Talks at Conferences and Meetings:

* = invited talks

1. *'Top Quark Physics at the Tevatron,' Rencontres du Blois, Blois, France 5/14.
2. *'Higgs Prospects at the Upgraded LHC,' Americas Workshop on the Linear Collider, Fermilab, 5/14.
3. 'ttH (H \rightarrow WW) at 14 TeV,' Snowmass ttH Workshop, UT Austin, Austin, TX, 05/13.
4. *'ttH at the LHC and Prospects for the Future,' Snowmass 2013 Energy Frontier Meeting, Brookhaven National Lab, Upton, NY, 4/13.
5. *'Top Quark Physics at the Tevatron,' overview at APS 2012, 3/12.
6. *'Electroweak Measurements and Top Quark Properties at the Tevatron,' Fermilab User's Meeting, 6/10
7. *'Measurement of the Top Quark and W Boson Masses,' Rencontres du Moriond, La Thuile, Italy 3/09.
8. *'Lessons from Full Dress Rehearsal,' LAr Performance Mtg., ATLAS LAr Week, 2/08.
9. *'B_s Lifetime and CP Violating Parameters,' Deep Inelastic Scattering Conference, Munich, Germany, 4/07.
10. *'Monitoring for Collisions,' LAr Monitoring Review, ATLAS LAr Week, 2/07.
11. *'Monitoring Status Report,' Calorimeter Performance Mtg, ATLAS LAr Week, 9/06.
12. 'Cosmic Ray Run Monitoring: LAr and Combined Tools,' Monitoring Mtg, ATLAS LAr Week, 6/06.
13. *'Monitoring Status,' Calorimeter Performance Mtg., ATLAS LAr Week, 2/06.
14. *'Top Pair Production Measurements at s^{1/2} = 2 TeV,' Particles and Nuclei in Collision Conf., Santa Fe, NM 10/05.
15. 'Disentangling SUSY Models with Experiment' TeV4LHC Workshop, Stony Brook, NY, 02/05.
16. *'Calorimeter Monitoring at D0,' ATLAS High Level Trigger Monitoring Mtg, 01/05
17. *'Calorimeter Calibration at the Tevatron,' ATLAS Calibration Mtg, Tatras Mtns, Slovakia, 12/04.
18. 'Studies of the Top Quark at DØ', Meeting of American Physical Society Ohio Section, Cleveland, OH, 10/03
19. *'Recent Run II Electroweak and QCD Results from DØ', Rencontres de la Physique, La Thuile, Italy, 3/03.
20. *'DØ Physics Plans for 2002-2003', DØ Annual Workshop plenary talk, Univ. of Oklahoma, Norman, OK, 7/02.

21. *'Top Physics at DØ: First Data and Future Prospects in Run II,' Pheno2002 Symposium, Madison, WI, 5/02.
22. 'Triggered and Untriggered Searches for GRB Optical Bursts with ROTSE, 197th Meeting of American Astron. Society, San Diego, CA, 1/01.
23. *'Prompt Optical Emission from Gamma-Ray Bursts.' Space Telescope Science Institute, 1999 May Symposium. 5/99.
24. 'Prompt Optical Emission from Gamma-Ray Bursts.' UNM-LANL Astronomers Meeting, Santa Fe, NM, 4/99.
25. *'Measurement of Top Quark Cross Section and Mass at DØ', Lake Louise Winter Institute, Lake Louise, Alberta, Canada, 2/97.
26. *'Measurement of Top Quark Cross Section at $s^{1/2} = 1.8 \text{ TeV}$ ', Meeting of Division of Particles and Fields, Minneapolis, MN, 8/96.
27. *'Calibration of DØ Calorimetry', VI Int. Conf. on Calorimetry in High Energy Physics, Frascati, Italy, 6/96.
28. *'Determination of the Jet Energy Scale', DØ Collaboration Meeting, DØ Physics Analysis Meeting, Ann Arbor, MI, 6/95.
29. 'Search for Top in Electron-Muon Final States', General Meeting of American Physical Society, Washington, D. C., 4/94.

Seminars and Colloquia:

1. 'A Light in the Dark: Unraveling Electroweak Symmetry Breaking with Hadronic Collisions,' seminar at SMU, Dallas, TX, 04/14.
2. 'Terrible Beauties: Supernovae and the Birth of Worlds,' Dean's Research Council, SMU, 05/14.
3. 'The Top Quark', seminar at Trinity University, San Angelo, TX, 09/11.
4. 'Truth, Beauty and the Physics of the Dark', colloquium to Dept. of Physics, U. of Texas, Arlington, Arlington, TX, 09/09.
5. 'Truth, Beauty and the Physics of the Dark', colloquium to Dept. of Physics, U. of Oklahoma, Norman, OK, 09/09.
6. 'Top and Bottom Quark Physics at the Tevatron', seminar to high energy physics group of Dept. of Physics, U. of Oklahoma, Norman, OK, 09/09.
7. 'Truth and Beauty', seminar to Dept. of Physics and Astronomy, seminar to high energy physics group, Rice U., Houston, TX, 09/09.
8. 'Truth and Beauty and Physics of the Dark,' SMU QuarkNet Seminar, 08/09.
9. 'Calorimeter Monitoring', seminar to European Union Artemis Graduate School, Max-Planck Institut fur Physik, Munich, Germany, 09/08.
10. 'Top Physics via Dilepton Final States', seminar to Dept. of Physics, Southern Methodist U, 10/05
11. 'Studies of the Top Quark at $s^{1/2} = 2 \text{ TeV}$ ', seminar to Physics, Massachusetts Institute of Technology, 3/04
12. 'Studying Truth: Measuring the Top Quark at the Energy Frontier', Dept. of Physics, U. of California, Irvine, 3/04
13. 'Studies of the Top Quark at $s^{1/2} = 2 \text{ TeV}$ ', Dept. of Physics colloquium, U. of Nebraska, 3/04,
14. 'Studies of the Top Quark at $s^{1/2} = 2 \text{ TeV}$ ', Dept. of Physics Seminar, U. of Minnesota, 2/04
15. 'Studying Truth: Measuring the Top Quark at the Energy Frontier', Dept. of Physics colloquium, Kansas State U. 2/04
16. 'Studying Truth: Measuring the Top Quark at the Energy Frontier', Dept. of Physics and Astronomy Colloquium, U. of South Carolina, 1/04.
17. 'Studies of the Top Quark at $s^{1/2} = 2 \text{ TeV}$ ', Dept. of Physics Seminar, Southern Methodist U., 01/04.
18. 'Studies of the Top Quark at the Energy Frontier', Dept. of Physics Colloquium, Northern Illinois U., 09/03.
19. 'Studies of the Top Quark at $s^{1/2} = 2 \text{ TeV}$ ', Dept. of Physics and Astronomy Seminar, Michigan State U., 09/03.

20. 'New Physics Results from $D\bar{0}$ ', Fermilab Wine & Cheese Seminar, 08/03.
21. 'Prompt Optical Emission from Gamma-ray Bursts.' Dept. of Physics and Astronomy Seminar, Michigan State University, East Lansing, MI, 9/00.
22. 'Prompt Optical Emission from Gamma-ray Bursts.' Dept. of Astronomy and Astrophysics Seminar, Pennsylvania State University, State College, PA, 9/00.
23. 'Prompt Optical Emission from Gamma-ray Bursts.' Dept. of Physics Seminar, University of Mississippi, Oxford, MS, 9/00
24. 'Prompt Optical Emission from Gamma-ray Bursts.' Dept. of Physics Seminar, Pennsylvania State University, State College, PA, 4/00.
25. 'Extreme Transience: Gamma-ray Bursts.' Dept. of Physics Colloquium, Case Western Reserve University, Cleveland, OH, 2/00.
26. 'Extreme Transience: Gamma-ray Bursts.' U. of Tevatron Seminar, Fermilab, Batavia, IL, 12/99.
27. 'Extreme Transience: Gamma-ray Bursts.' Dept. of Physics Colloquium, U. of Notre Dame, Notre Dame, IN, 11/99.
28. 'A New Window on Transient Celestial Phenomena', Dept. of Science and Math Seminar, College of Santa Fe, Santa Fe, NM, 3/99.
29. 'Search for Top in Dielectron Final States', Seminar given at Lawrence Berkeley Lab, 11/96.
30. 'Search for Top in Dielectron Final States', Dept. of Physics Seminar, SUNY at Stony Brook, 11/96.
31. 'Search for Top in Dielectron Final States', Seminar given at Argonne National Lab, 11/96.

Workshops and Tutorials

1. 'ttH Snowmass Workshop', co-organizer, U of Texas Austin, Austin, TX, May 3-4, '13.
2. 'Calorimeter Data Quality Tutorial,' given to European Union Artemis Graduate School, Max-Planck Institut fur Physik, Munich, Germany, Sep. 15-19, '08.
3. 'LAr Monitoring Review', organizer and speaker, (my talks: 'Introduction and Goals', 'Monitoring for Collisions', and 'Outlook and Conclusions'), CERN, Geneva, Switzerland, Feb. 13, '07.
4. 'Calorimeter Data Quality Workshop,' organizer of tutorial given to ATLAS students and post-docs, CERN, Geneva, Switzerland, Jun. 11-12, '07.
5. 'Calorimeter Commissioning and Monitoring Workshop', organizer and speaker, (my talks: 'Introductory Remarks', 'Monitoring', and 'Computing/Data Integrity Working Group Summary'), CERN, Geneva, Switzerland, Oct. 13-14, '05.

Posters

1. 'A Quark in the Life of a Student', Top Turns Ten Symposium, Fermilab, Batavia, IL 10/05.
2. 'D0 Main Ring Corrections', Top Turns Ten Symposium, Fermilab, Batavia, IL 10/05.
3. 'A Preliminary Survey of Short Time-Scale Optical Variables with ROTSE,' 197th Meeting of American Astron. Society, San Diego, CA, 1/01.
4. 'Studies of Optical Variability with ROTSE', 192nd Meeting of American Astron. Society, San Diego, CA, 6/98.
5. 'Observation of the Top Quark at $D\bar{0}$ ', Dept. of Energy Annual Review, Batavia, IL, 5/95.
6. 'Scintillating Fiber Tracking', Dept. of Energy Annual Review, Batavia, IL, 5/93.