

Curriculum Vitae Robert Kehoe

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Department of Physics
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American Physical Society, member:
Div. of Particles and Fields
Div. of Astrophysics
American Astronomical Society, member:
High Energy Astrophysics Div.

Education:

Ph.D., high energy physics, U. of Notre Dame ('96)

Dissertation: 'Search for the Top Quark in Dielectron Final States at $s^{1/2} = 1.8$ TeV and Measurement of the Response of the DØ U/LAr Calorimeter to Jets'

Advisor: Prof. Randall Ruchti

B. A., physics, Earlham College ('89)

Thesis: 'Calibration of Mini-Orange Spectrometers and BGO Scintillators'

Research:

Full/Associate/Assistant Professor, Southern Methodist U. ('04-present)

ATLAS Experiment

Research Areas: Discovery and study of Higgs boson to gauge boson pairs
Analysis of Diboson events in the Standard Model
Search for Extra Dimensions in diphoton events
Jet Energy Calibration

Advisorship: 5 graduate students, 3 post-docs, 1 software engineer

Leadership: Jet/Etmiss Pile-up Scan Task Force ('15-present), convenor
Higgs WW Theory group ('12-'15), convenor
Pisa Hadronic Calibration Workshop, ('10), session chair
Hadronic Calibration Workshop Review Panel ('09), chair
LAr Calorimeter Monitoring & Data Quality ('05-'08), convenor

Technical Contributor: Monitoring Gatherer conceptual design
Data Quality Monitoring Framework conceptual design
Calorimeter Monitoring algorithms

Technical Supervisor: Trigger Core Software ('11-present), PI
Monitoring and Data Quality Software ('05-'10), PI

Internal Referee: Jet Energy Calibration, reviewer ('08-'09)
Trigger Coordinator Search Committee ('06), member

DØ Experiment, PI

Research Areas: Top quark mass in dilepton events
Jet Energy Calibration
Electron Identification

Top pair production cross section in dilepton channels

Advisorship: 2 graduate students, 2 post-docs, 2 undergraduates

Leadership: B_s Lifetime and CP violation Editorial Board ('06-'11), chair

Technical Supervision: Level 1 Calorimeter monitoring software ('04-'07)

Internal Referee: Level 1 Calorimeter review panel ('05), member

Outreach: Fermilab Today Frontier Science Result, '14, 'jet energy scale
Fermilab Today Result of the Week, '12, '09, '06, Science Daily '09, top
quark mass

General High Energy Physics

Research Area: Snowmass Higgs + top quark pair associated production ('13)

Review: Review of top quark physics results ('08)

External Referee: DOE: '09 grant for 2 university groups, High Energy Physics
NSF (particle physics): '12 career award; '14 new university group

Astrophysics (DESI and ROTSE experiments)

Research Areas: Spectroscopic Survey of Dark Energy (2014-present)

Spectroscopy and Photometry of Supernovae (2012-present)

Search for and study of Gamma-ray burst (GRB) optical counterparts
(thru 2006, 2013-present)

Undergraduate research in variable star searches (2007-present)

Awards: New Investigator, Texas Space Grant Consortium (NASA), '14
SMU Dedman Dean's Research Council, '13

Advisorship: 8 undergraduates, 2 graduates

Outreach: Fox-4 TV 9pm News: Interview on NASA Discovery of 7 Earth-like
Planets, Feb. '17

2015 Physics Symposium, 'Through a Cosmos Darkly', Apr. 12th '15

KERA radio Sep. 5th '14, Dallas Morning News Aug. 30th '14, high
school astrophysics research

Houston Chronicle Jun. 7th, '14, EarthSky, Science Daily articles, '14,
distant GRBs

Science Daily '13, '16, '17 India and Pakistan online news, '13, '17 SN
discoveries, delta Scuti discovery

External Referee: NASA '14 review panel Chair for Astron. Data Anal. Program
(ADAP)

Research Associate, Michigan State University ('01-'04)

DØ Experiment

Research Area: Top pair production cross sections

Leadership: Top Production Group, convenor ('02-'04)

Jet Energy Scale Group, convenor ('01-'02)

Electron Identification Task Force, coordinator ('03-'04)

Technical Contributions: Level 1 Calorimeter monitoring algorithms

Level 1 Calorimeter installation and commissioning

Calorimeter analog electronics commissioning

Jet energy scale software, methodology, training

Level 1 Calorimeter Upgrade Task Force, analyzer ('01)

Internal Referee: Jets and Missing E_T Group, internal reviewer ('02)

Outreach: Fermilab Today Result of the Week, 10/03.

Astrophysics

Research Areas: Untriggered search for Optical GRB Emission

Short Duration GRB Optical Counterpart Search

External Referee: NSF AST Major Research Initiatives, panelist

Mon. Not. R. Astron. Soc. Letters, referee

Research Fellow, U. of Michigan ('97-'00)

Robotic Optical Transient Search Experiment

Research Areas: Discovery of Contemporaneous Optical GRB Emission

Long Duration GRB Optical Counterpart Search

Untriggered GRB Optical Counterpart Search

Technical Contributions: Online and relative photometry

ROTSE1 Telescope Installation and Commissioning

Robotic operations and data acquisition system, author

Outreach: Astronomy Magazine, Apr '00 issue

Graduate Research Assistant, U. of Notre Dame ('90-'96)

DØ Experiment

Research Areas: Discovery and study of the Top Quark
Search for Top Quark in dielectron decays
Jet Energy Scale correction
Main Ring Calorimeter Corrections
Forward electron identification using the Transition Radiation Detector
Outreach: South Bend Tribune story, 1995.

Scintillating Fiber Tracker, Solenoidal Detector Collaboration

Undergraduate Research Assistant ('88)

GLCA internship in nuclear physics, Oak Ridge National Laboratory
NSF/REU internship in particle physics (IMB experiment), University of Notre Dame.

Individuals Mentored and Advised in Research (since 2004)

Software Engineers: 1
Post-docs: 5
Ph. D. students: 10
M.S. students: 5
Undergraduates: 13

Teaching:

Associate/Assistant Professor, Southern Methodist University ('04-now)

Courses: PHY 7361: Experimental Methods of Particle Physics
PHY 3305: Introduction to Modern Physics
PHY 1304: Introduction to Electricity and Magnetism
PHY 1301: Physics of the Dark: Ideas of Modern Physics

Course Development:

Creation of experiment-oriented courses in graduate curriculum: PHY 7361
Addition of introductory modern physics course for non-majors: PHY 1301

Awards: Outstanding Service, McNair Scholars Program, Sep. '14
Sparks Teaching Award, May '14
Distinguished University Citizen Award, Jun '13
Hope Teaching Award '06

Leadership: SMU Undergraduate Research, Director ('12-now)
Undergraduate Research Assistantships, Coordinator ('10-'12)
Physics Undergraduate Research, Coordinator ('07-'15)
Physics Undergraduate Curriculum Committee, Convenor ('05-'06)

Programs Developed: SMU Research Day, Undergraduate Presentations '14-now
Summer Research Assistantships and Fellows, '12-now
Part-time Summer Undergraduate Research Assistantships, '10-now
Engaged Learning program

Engaged Learning Advisory Council, member '12-now
SACS Quality Enhancement Plan, member '10-'11

Undergraduate Research subcommittee, member '10
Pilot program Communications subcommittee, chair '11
Engaged Learning Director Search subcommittee, member '11

Outreach: Physics Dept. Honors Society, Terrible Beauties, Mar. 18th '15
The Society of Physics Students Observer, Vol. XLIV, Issue 2 (2010) for
undergraduate mentorees' research

Adjunct Professor, Washtenaw Community College ('00)

Course: Astronomy evening classes

Teaching Assistant, U. of Notre Dame ('89-'91), Earlham College ('85-'89)

Courses: Introductory astronomy, cosmology, physics labs, introductory physics, computer science, tutoring students with disabilities

List of Publications

Selected Publications:

1. Extensive spectroscopy and Photometry of the Type IIP supernova 2013ej, *Astrophys. Journ.*, 822:1 (2016).
2. Precise measurement of the top quark mass in dilepton decays using optimized neutrino weighting, *Phys. Lett. B* 752:18 (2016).
3. Observation and measurement of Higgs boson decays to WW^* with the ATLAS detector, *Phys. Rev. D* 92:012006 (2015).
4. Top Quark Physics at the Tevatron, R. L. Kehoe, subm. to *Proc. Of Rencontres de Blois, Blois, France, May 18-23, 2014*, ed. Jacques Dumarchez, in press (2014).
5. Jet energy scale determination in the D0 Experiment, *Nucl. Instrum. Meth. A* 763:442 (2014).
6. A trio of gamma-ray burst supernovae: GRB 120729A, GRB 130215A/SN 2013ez, and GRB 130831/SN 2013fu, Cano et al., *Astron. & Astroph.*, 568:A19 (2014).
7. Electron and Photon Identification in the D0 Experiment, Abazov et al., *Nucl. Instrum. Meth. A* 750:78 (2014).
8. 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).
9. 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).
10. Evidence for the spin 0 nature of the Higgs boson using ATLAS data, Aad et al., *Phys. Lett. B* 726:120 (2013).
11. 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).
12. 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).
13. A Particle Consistent with the Higgs Boson Observed with the ATLAS Detector at the Large Hadron Collider, *Science* 338:1576 (2012).
14. 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).
15. Observation of an Excess of Events in the Search for the Standard Model Higgs Boson in the $H \rightarrow WW \rightarrow \ell\ell$ Channel with the ATLAS Detector, Aad, et al., ATLAS-CONF-2012-098, Jul. 17 (2012).
16. Combination of Top Quark Mass Measurements from the Tevatron Collider, D0+CDF Collabs., *Phys. Rev. D* 86:092003 (2012).
17. 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).
18. 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).
19. Performance of the ATLAS Trigger System in 2010, ATLAS Collab., *Eur. Phys. J. C* 72:1849 (2012).
20. 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).
21. 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).
22. Measurement of the Top Quark Mass in emu Final States with Neutrino Weighting in Run II at D0, D0-CONF-6104 (2010).
23. 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).
24. 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).
25. 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).
 26. The ATLAS Experiment at the CERN Large Hadron Collider, ATLAS Collab., *J. Instrum.* 3:S08003 (2008).
 27. Design and Implementation of the new D0 Level-1 Calorimeter Trigger, M. Abolins et al., *Nucl. Inst. Meth. A* 584:75 (2008).
 28. 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).
 29. 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).
 30. Measurement of the top quark mass in the dilepton channel, V. Abazov, et al. (D0 Collab.), *Phys. Lett. B.* 655, 7 (2007).
 31. Early-time Observations of the GRB 050319 Optical Transient, R. Quimby et al., *Astrophys. J.* 640:402 (2006).
 32. The Upgraded DØ Detector, V. Abazov, et al. (D0 Collab.) *Nucl. Instrum. Methods in Phys. Res. A* **565**, 463 (2006).
 33. Measurement of the $t\bar{t}$ production cross section in $p\bar{p}$ collisions at $\sqrt{s}=1.96$ TeV in dilepton final states, V. Abazov, et al., *Phys. Lett. B* 626:55 (2005).
 34. A Search for Untriggered GRB Afterglows with ROTSE-III, E. Rykoff et al., *Astrophys. J.* 631:1032 (2005).
 35. Northern Sky Variability Survey (NSVS): Public data release, P. Wozniak et al., *Astron. J.* 127:2436 (2004).
 36. The ROTSE-III Robotic Telescope System, C. Akerlof et al., *Pub. Astron. Soc. Pac.* Vol. 115, 803:132 (2003).
 37. $t\bar{t}$ Production Cross Section in $p\bar{p}$ Collisions at $\sqrt{s}=1.8$ TeV, V. Abazov et al., *Phys. Rev. D* 67:012004 (2003).
 38. An Untriggered Search for Optical Bursts, R. Kehoe et al., *Astrophys. J* 577:845 (2002).
 39. SDSS J124602.54+011318.8: A Highly Luminous Optical Transient at $z=0.385$, D. Vanden Berk et al., *Astrophys. J.* 576:673 (2002).
 40. 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).
 41. A Search for Early Optical Emission from Short and Long Duration Gamma-ray Bursts, R. Kehoe et al., *Astrophys. J. Lett.* 554:159 (2001).
 42. Rapid Optical Follow-up Observations of SGR Events with ROTSE-I, C. Akerlof et al., *Astrophys. J.* 542:251 (2000).
 43. Prompt Optical Observations of Gamma-ray Bursts, C. Akerlof et al., *Astrophys. J. Lett.* 532:25 (2000).
 44. ROTSE All Sky Surveys for Variable Stars I: Test Fields, C. Akerlof et al., *Astron. J.* 119:1901 (2000).
 45. 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.
 46. Observation of Contemporaneous Optical Radiation from a Gamma-Ray Burst, C. Akerlof, et al., *Nature.* 398:400 (1999).
 47. Determination of the Absolute Jet Energy Scale in the DØ Calorimeters, B. Abbott, et al., *Nucl. Instr. and Meth.* A424:352 (1999).
 48. 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).
 49. Observation of the Top Quark, S. Abachi, et al., *Phys. Rev. Lett.* 74:2632 (1995).
 50. S. Abachi *et al.*, 'Search for High Mass Top Quark Production in proton-antiproton Collisions at $s^{1/2} = 1.8$ TeV,' *Phys. Rev. Lett.* 74:2422 (1995).
 51. B. Abbott *et al.*, 'Test Beam Results Using Scintillating Fibers Readout by a Multinode Phototube and Visible Light Photon Counters,' *Nucl. Instrum. Meth.* A327:319 (1993).

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 Properties', CIPANP Conference, Vail, CO 5/15.
2. *Top Quark Physics at the Tevatron,' Rencontres de Blois, Blois, France 5/14.
3. *Higgs Prospects at the Upgraded LHC,' Americas Workshop on the Linear Collider, Fermilab, 5/14.
4. 'ttH (H \rightarrow WW) at 14 TeV,' Snowmass ttH Workshop, UT Austin, Austin, TX, 05/13.
5. *ttH at the LHC and Prospects for the Future,' Snowmass 2013 Energy Frontier Meeting, Brookhaven National Lab, Upton, NY, 4/13.
6. *Top Quark Physics at the Tevatron,' overview at APS 2012, 3/12.
7. *Electroweak Measurements and Top Quark Properties at the Tevatron,' Fermilab User's Meeting, 6/10
8. *Measurement of the Top Quark and W Boson Masses,' Rencontres du Moriond, La Thuile, Italy 3/09.
9. *Lessons from Full Dress Rehearsal,' LAr Performance Mtg., ATLAS LAr Week, 2/08.
10. *B_s Lifetime and CP Violating Parameters', Deep Inelastic Scattering Conference, Munich, Germany, 4/07.
11. *Monitoring for Collisions,' LAr Monitoring Review, ATLAS LAr Week, 2/07.
12. *Monitoring Status Report,' Calorimeter Performance Mtg, ATLAS LAr Week, 9/06.

13. 'Cosmic Ray Run Monitoring: LAr and Combined Tools,' Monitoring Mtg, ATLAS LAr Week, 6/06.
14. *'Monitoring Status', Calorimeter Performance Mtg., ATLAS LAr Week, 2/06.
15. *'Top Pair Production Measurements at $s^{1/2} = 2$ TeV', Particles and Nuclei in Collision Conf., Santa Fe, NM 10/05.
16. 'Disentangling SUSY Models with Experiment' TeV4LHC Workshop, Stony Brook, NY, 02/05.
17. *'Calorimeter Monitoring at D0,' ATLAS High Level Trigger Monitoring Mtg, 01/05
18. *'Calorimeter Calibration at the Tevatron,' ATLAS Calibration Mtg, Tatras Mtns, Slovakia, 12/04.
19. 'Studies of the Top Quark at DØ', Meeting of American Physical Society Ohio Section, Cleveland, OH, 10/03
20. *'Recent Run II Electroweak and QCD Results from DØ', Rencontres de la Physique, La Thuile, Italy, 3/03.
21. *'DØ Physics Plans for 2002-2003', DØ Annual Workshop plenary talk, Univ. of Oklahoma, Norman, OK, 7/02.
22. *'Top Physics at DØ: First Data and Future Prospects in Run II,' Pheno2002 Symposium, Madison, WI, 5/02.
23. 'Triggered and Untriggered Searches for GRB Optical Bursts with ROTSE, 197th Meeting of American Astron. Society, San Diego, CA, 1/01.
24. *'Prompt Optical Emission from Gamma-Ray Bursts.' Space Telescope Science Institute, 1999 May Symposium. 5/99.
25. 'Prompt Optical Emission from Gamma-Ray Bursts.' UNM-LANL Astronomers Meeting, Santa Fe, NM, 4/99.
26. *'Measurement of Top Quark Cross Section and Mass at DØ', Lake Louise Winter Institute, Lake Louise, Alberta, Canada, 2/97.
27. *'Measurement of Top Quark Cross Section at $s^{1/2} = 1.8$ TeV', Meeting of Division of Particles and Fields, Minneapolis, MN, 8/96.
28. *'Calibration of DØ Calorimetry', VI Int. Conf. on Calorimetry in High Energy Physics, Frascati, Italy, 6/96.
29. *'Determination of the Jet Energy Scale', DØ Collaboration Meeting, DØ Physics Analysis Meeting, Ann Arbor, MI, 6/95.
30. 'Search for Top in Electron-Muon Final States', General Meeting of American Physical Society, Washington, D. C., 4/94.

Seminars and Colloquia:

1. 'Cosmic Rulers to Study Dark Energy', seminar at John Carroll University, Cleveland, 12/16.
2. "Candles in the Dark", at '2015 Physics Symposium: Through a Cosmos Darkly,' SMU, Dallas 04/15.
3. 'A Light in the Dark: Unraveling Electroweak Symmetry Breaking with Hadronic Collisions,' seminar at SMU, Dallas, TX, 04/14.
4. 'Terrible Beauties: Supernovae and the Birth of Worlds,' Dean's Research Council, SMU, 05/14.
5. 'The Top Quark', seminar at Trinity University, San Angelo, TX, 09/11.
6. 'Truth, Beauty and the Physics of the Dark', colloquium to Dept. of Physics, U. of Texas, Arlington, TX, 09/09.
7. 'Truth, Beauty and the Physics of the Dark', colloquium to Dept. of Physics, U. of Oklahoma, Norman, OK, 09/09.
8. '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.
9. 'Truth and Beauty', seminar to Dept. of Physics and Astronomy, seminar to high energy physics group, Rice U., Houston, TX, 09/09.
10. 'Truth and Beauty and Physics of the Dark,' SMU QuarkNet Seminar, 08/09.
11. 'Calorimeter Monitoring', seminar to European Union Artemis Graduate School, Max-Planck Institut fur Physik, Munich, Germany, 09/08.

12. 'Top Physics via Dilepton Final States', seminar to Dept. of Physics, Southern Methodist U, 10/05
13. 'Studies of the Top Quark at $s^{1/2} = 2 \text{ TeV}$ ', seminar to Physics, Massachusetts Institute of Technology, 3/04
14. 'Studying Truth: Measuring the Top Quark at the Energy Frontier', Dept. of Physics, U. of California, Irvine, 3/04
15. 'Studies of the Top Quark at $s^{1/2} = 2 \text{ TeV}$ ', Dept. of Physics colloquium, U. of Nebraska, 3/04,
16. 'Studies of the Top Quark at $s^{1/2} = 2 \text{ TeV}$ ', Dept. of Physics Seminar, U. of Minnesota, 2/04
17. 'Studying Truth: Measuring the Top Quark at the Energy Frontier', Dept. of Physics colloquium, Kansas State U. 2/04
18. 'Studying Truth: Measuring the Top Quark at the Energy Frontier', Dept. of Physics and Astronomy Colloquium, U. of South Carolina, 1/04.
19. 'Studies of the Top Quark at $s^{1/2} = 2 \text{ TeV}$ ', Dept. of Physics Seminar, Southern Methodist U., 01/04.
20. 'Studies of the Top Quark at the Energy Frontier', Dept. of Physics Colloquium, Northern Illinois U., 09/03.
21. 'Studies of the Top Quark at $s^{1/2} = 2 \text{ TeV}$ ', Dept. of Physics and Astronomy Seminar, Michigan State U., 09/03.
22. 'New Physics Results from $D\bar{D}$ ', Fermilab Wine & Cheese Seminar, 08/03.
23. 'Prompt Optical Emission from Gamma-ray Bursts.' Dept. of Physics and Astronomy Seminar, Michigan State University, East Lansing, MI, 9/00.
24. 'Prompt Optical Emission from Gamma-ray Bursts.' Dept. of Astronomy and Astrophysics Seminar, Pennsylvania State University, State College, PA, 9/00.
25. 'Prompt Optical Emission from Gamma-ray Bursts.' Dept. of Physics Seminar, University of Mississippi, Oxford, MS, 9/00
26. 'Prompt Optical Emission from Gamma-ray Bursts.' Dept. of Physics Seminar, Pennsylvania State University, State College, PA, 4/00.
27. 'Extreme Transience: Gamma-ray Bursts.' Dept. of Physics Colloquium, Case Western Reserve University, Cleveland, OH, 2/00.
28. 'Extreme Transience: Gamma-ray Bursts.' U. of Tevatron Seminar, Fermilab, Batavia, IL, 12/99.
29. 'Extreme Transience: Gamma-ray Bursts.' Dept. of Physics Colloquium, U. of Notre Dame, Notre Dame, IN, 11/99.
30. 'A New Window on Transient Celestial Phenomena', Dept. of Science and Math Seminar, College of Santa Fe, Santa Fe, NM, 3/99.
31. 'Search for Top in Dielectron Final States', Seminar given at Lawrence Berkeley Lab, 11/96.
32. 'Search for Top in Dielectron Final States', Dept. of Physics Seminar, SUNY at Stony Brook, 11/96.
33. 'Search for Top in Dielectron Final States', Seminar given at Argonne National Lab, 11/96.

Workshops and Tutorials

1. 'QuickCat Spectroscopic Simulator', organizer, Argonne Nat. Lab, Chicago, IL, Nov. '15.
2. 'ttH Snowmass Workshop', co-organizer, U of Texas Austin, Austin, TX, May 3-4, '13.
3. 'Calorimeter Data Quality Tutorial,' given to European Union Artemis Graduate School, Max-Planck Institut fur Physik, Munich, Germany, Sep. 15-19, '08.
4. 'LAr Monitoring Review', organizer and speaker, (my talks: 'Introduction and Goals', 'Monitoring for Collisions', and 'Outlook and Conclusions'), CERN, Geneva, Switzerland, Feb. 13, '07.
5. 'Calorimeter Data Quality Workshop,' organizer of tutorial given to ATLAS students and post-docs, CERN, Geneva, Switzerland, Jun. 11-12, '07.

6. '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 DØ', Dept. of Energy Annual Review, Batavia, IL, 5/95.
6. 'Scintillating Fiber Tracking', Dept. of Energy Annual Review, Batavia, IL, 5/93.