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Heidi M Schellman

Department of Physics
Oregon State University
301 Weniger Hall
Corvallis, OR, 97331
Phone: +1-541-737-4631
Email: *Heidi.Schellman@science.oregonstate.edu*

Present Position

Professor and Head of Physics
College of Science
Oregon State University

Area of Interest: Experimental High Energy Physics

Education

B. S. Degree, 1977, Stanford University (Mathematics)
Ph.D. Degree, December, 1984, University of California. Berkeley (Physics)
Ph.D. Advisor: George Trilling

Employment

1979 - 1984	Research Assistant, Lawrence Berkeley Laboratory Mark II collaboration
1985 - 1988	Research Associate, EFI, University of Chicago CCFR Collaboration
1988 - 1990	Wilson Fellow, Fermi National Accelerator Laboratory E665 Muon Scattering Collaboration
1990 - 1995	Assistant Professor, Dept. of Physics and Astronomy, Northwestern University E665 and D0 Collaborations
1995 - 2000	Associate Professor, Dept. of Physics and Astronomy, Northwestern University D0 and NuTeV Collaborations
1999-2000	Staff Scientist at Fermilab (leave of absence from Northwestern)
2000-2014	Professor, Dept. of Physics and Astronomy, Northwestern University CTEQ, D0, $g - 2$ and Minerva Collaborations
2004-2007	Associate Dean for Research and Graduate Studies Weinberg College of Arts and Sciences, Northwestern University
2010 - 2014	Chair, Department of Physics and Astronomy, Northwestern University
2015 - present	Head, Department of Physics, Oregon State University

Awards and Honors

- 1988 Robert Rathbun Wilson Fellowship,
Fermi National Accelerator Center
- 1991 Department of Energy Outstanding Junior Investigator Award
- 1993 A.P. Sloan Fellowship
- 1995 AT&T Fellowship
- 1997 Associated Student Government Faculty Honor Roll
- 2000 Elected Fellow of the American Physical Society
- 2000 Fermilab Employee Recognition Award

Professional Service

- 1991-1997 Spokesperson of Fermilab Experiment E665
- 1993-1995 Member, Fermilab Users Executive Committee
- 1996-1998 Member, APS Division of Particles and Fields Executive Committee
- 1996-1998 D0 Collaboration QCD convener
- 1996-1999 Member, Dept. of Energy High Energy Physics Advisory Panel
- 1998-2001 Member, Large Hadron Collider Council,
European Center for Nuclear Research (CERN)
- 2000 Co-leader Fermilab Neutrino Factory Physics Study
- 2000-2001 Co-leader D0 software and computing project
- 2001-2005 Member, Fermilab Program Advisory Committee
- 2005-2007 Member, DOE/NSF Neutrino Scientific Advisory Group (NUSAG)
- 2005-2012 Member of the Board, Fermilab Research Association
- 2007-2008 Chair, D0 Collaboration Institutional Board
- 2008-2012 Chair, FRA Visiting Scholars Selection Committee
- 2008- Computing Infrastructure Coordinator, MINERvA collaboration
- 2010-2013 Sanford Underground Research Facility Program Advisory Committee
- 2010 Co-leader for Strategic Partnerships in development of the NU Strategic Plan
- 2012-2014 Member and Secretary, C11 Committee (Particle Physics)
International Union for Pure and Applied Physics
- 2013 Fermilab Deputy Director Search Committee
- 2014- Jefferson Laboratory Program Advisory Committee
- 2015- Brookhaven Laboratory Nuclear and Particle Physics Program Advisory Committee
- 2015- CERN Scientific Policy Committee
- 2015- Member and Vice Chair, C11 Commission(Particle Physics)
International Union for Pure and Applied Physics

Selected Papers

Co-Author on 609 publications with 39,042 citations. High Energy Physics lists all contributors on all papers. I list the most significant recent papers below. The full list is available at <http://inspirehep.net>

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- [1] W. K. Tung, J. G. Morfin, H. Schellman, S. Kunori, A. Caldwell, F. I. Olness, “Structure Functions and Parton Distributions,” in 4th DPF Summer Study on High-energy Physics in the 1990s, Snowmass, CO, USA, 27 Jun - 15 Jul 1988, pp.305-330. FERMILAB-CONF-89-026 This study led to the Morfin-Tung and CTEQ PDF sets.
- [2] M. R. Adams *et al.*, [E665 Collaboration], “Proton and deuteron structure functions in muon scattering at 470-GeV,” *Phys. Rev.* **D54**, 3006-3056 (1996).
- [3] B. Abbott *et al.*, [D0 Collaboration], “The inclusive jet cross section in $\bar{p}p$ collisions at $\sqrt{s} = 1.8$ TeV,” *Phys. Rev. Lett.* **82**, 2451-2456 (1999). [hep-ex/9807018].
- [4] C. Albright *et al.*, S. Geer and H. Schellman editors, “Physics at a Neutrino Factory,” FERMILAB-FN-0692. Aug 2000. 133 pp. arXiv:hep-ex/0008064
- [5] G. P. Zeller *et al.*, [NuTeV Collaboration], “A Precise determination of electroweak parameters in neutrino nucleon scattering,” *Phys. Rev. Lett.* **88**, 091802 (2002). [hep-ex/0110059].
- [6] [arXiv:0908.0766 [hep-ex]]. V. M. Abazov *et al.* [D0 Collaboration], “Measurement of the W Boson Mass with the D0 Detector,” *Phys. Rev. Lett.* **108**, 151804 (2012). [arXiv:1203.0293 [hep-ex]]
- [7] V. M. Abazov *et al.* [D0 Collaboration], “Measurement of $\sin^2 \theta_{\text{eff}}^{\ell}$ and Z-light quark couplings using the forward-backward charge asymmetry in $p\bar{p} \rightarrow Z/\gamma^* \rightarrow e^+e^-$ events with $\mathcal{L} = 5.0 \text{ fb}^{-1}$ at $\sqrt{s} = 1.96$ TeV,” *Phys. Rev. D* **84**, 012007 (2011) [arXiv:1104.4590 [hep-ex]].
- [8] L. Fields *et al.* [MINERvA Collaboration], “Measurement of Muon Antineutrino Quasi-Elastic Scattering on a Hydrocarbon Target at $E_{\nu} \sim 3.5$ GeV,” *Phys. Rev. Lett.* **111**, 022501 (2013) [arXiv:1305.2234 [hep-ex]].
- [9] T. A. Aaltonen *et al.* [CDF and D0 Collaborations], “Combination of CDF and D0 W-Boson Mass Measurements,” *Phys. Rev. D* **88**, 052018 (2013) [arXiv:1307.7627 [hep-ex]].
- [10] A. V. Kotwal, H. Schellman and J. Sekaric, “Review of Physics Results from the Tevatron: Electroweak Physics,” Submitted to IJMPA (2014). arXiv:1409.5163 [hep-ex].

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Graduate Advisees

Panagiotis Spentzouris (Fermilab, Head, Scientific Computing Division), Tacy Joffe-Minor (Arkansas, Visiting Assistant Professor) , Tracy Taylor Thomas (Jive Software, Portland, OR), Robert Snihur (Nebraska, CMS Computing), GERALYN “Sam” Zeller (Fermilab, MicroBooNE spokesperson), Tim Andeen (Columbia, ATLAS), Gabriel Juarez (co-advisor)(MIT Biophysics), Sahal Yacoob (Lecturer, KwaZulu-Natal, SA, ATLAS) and Cheryl Patrick (present MINER ν A)

Postdoctoral Advisees

Iain Bertram (Lancaster, ATLAS), Lucyna de Barbaro (Lucent/Alcatel), Harald Fox (Lancaster, ATLAS), Jonathan Hays (Queen Mary College, London, CMS), Gregory Davis (IDA), Michael Kirby (Fermilab, MicroBoone), Laura Fields (present, Minerva/LBNE), Leah Welty-Rieger (present $g - 2$)