

Eric Swanson

Curriculum Vitae

Contact

Professor of Physics

Department of Physics and Astronomy, University of Pittsburgh, Pittsburgh PA 15260

: swansone@pitt.edu

: @EScottSwanson

: www.physicsandastronomy.pitt.edu/people/eric-s-swanson

SWANSON SCIENTIFIC CONSULTING

consultant

: swanson.scientific@gmail.com

: swansonscientific.com

Education

Ph.D., *Theoretical Physics*, University of Toronto, (advisor: N. Isgur). **1991**
Numerical Studies of Two–Dimensional Quantum Spin Systems

M.Sc., *Physics*, University of Toronto, (advisor: N. Isgur). **1985**
Strings, Quarks, and Other Things

B.Math., *Applied Mathematics*, University of Waterloo, (advisor: J. Čížek). **1984**
The Linearized Quotient-Difference Algorithm

Honors

APS Fellow. **2010**
For contributions to the theory of hadron spectroscopy, especially in the areas of charm-quark mesons, gluonic excitations, and mesonic molecules.

PPARC Fellow, *Oxford University*. **2005**

NSERC Postdoctoral Fellow, *MIT*. **1991–1993**

Edward Christie Stevens Award, *University of Toronto*. **1989–1990**

van Kranendonk Teaching Assistant Award, *University of Toronto*. **1989**

University of Toronto Open Award, *University of Toronto*. **1988–1989**

McLennan Award, *University of Toronto*. **1984**

NSERC Undergraduate Student Research Award, *University of Waterloo*. **1982**

Ontario Scholar. **1979**

Positions

Professor, *University of Pittsburgh*.	**2015–present**
Associate Professor, *University of Pittsburgh*.	**2007–2015**
Visiting Scholar, *University of Oxford, Oxford, UK*.	**2005**
Assistant Professor, *University of Pittsburgh*.	**2000–2006**
Visiting Scientist, *TRIUMF, Vancouver, Canada*.	**1999**
Consultant, *LANL, Los Alamos, NM*.	**1999–2001**
Assistant Professor, *North Carolina State University*.	**1994–1999**
Research Associate, *Center for Theoretical Physics, MIT, Boston, MA*.	**1993–1994**
Visiting Scientist, *Rutherford Appleton Lab, Didcot, UK*.	**1993**
Postdoctoral Fellow, *Center for Theoretical Physics, MIT, Boston, MA*.	**1991–1993**
Visiting Scholar, *Department of Theoretical Physics, Oxford University, Oxford, UK*.	**1986–1987**
teaching assistant, *Department of Physics, University of Toronto, Toronto, Canada*.	**1984–1990**
teaching assistant, *Department of Applied Mathematics, University of Waterloo, Waterloo, Canada*.	**1980–1983**
research assistant, *Ground Water Research Institute, University of Waterloo, Waterloo, Canada*, advisor: E. Frind.	**1984**
NSERC summer scholar, *Department of Chemistry, University of Waterloo, Waterloo, Canada*, advisor: J. Ćižek.	**1983**
AECL summer student, *Chalk River Environmental Authority, CRNL, Chalk River, Ontario*.	**1982**
AECL summer student, *Applied Mathematics Branch, CRNL, Chalk River, Ontario*.	**1981**

Publications

Books

Applied Computational Physics, J.F. Boudreau and E.S. Swanson, Oxford University Press (2018)

Science and Society, 2nd edition, E.S. Swanson and M.L. Good, Springer (2026)

Science and Society, E.S. Swanson, Springer (2015)

Refereed Publications

80+ published papers, 14500+ citations, h-index=54, 1 paper with 1000+ citations, 6 papers with 500+ citations, 34 papers with 100+ citations, top 2% research interest at ResearchGate

Nonrefereed Publications

12 nonrefereed publications; 5 white papers, 2 Snowmass reports

Conference Proceedings

63 published conference proceedings

Grants

funding since 1995

Mentoring

8 postdocs (all currently with faculty positions); 9 graduate students supervised; 5 undergraduates supervised; 19 PhD committees; 10 external PhDs

Service

Outreach
8 op-eds; interviewed for 17 media articles; 2 radio interviews; 8 public lectures; 4 high school visits

Departmental and University
service on 36 committees dating from 1993; implemented first departmental online homework system; led redesign of departmental website

National
Spokesperson, ExoHad topical collaboration; chair APS Topical Group on Hadronic Physics; referee for 13 journals; referee for 4 national funding agencies; reviewer for 3 DOE Early Career awards; chair GHP APS fellowship committee

Reviews
service on 16 review panels for DOE and NSF; 6 textbook reviews

Organizational
organizer for 16 meetings; session organizer in 7 meetings, editor for 3 conference proceedings

International
Nobel Prize nominator, reviewer for Royal Irish Academy, Deutsche Forschungsgemeinschaft, Austrian Science Fund, NSERC (Canada), Research Corp, CRDF, promotion to full professor (Canada, Pakistan), international advisory committee (4), workshop organizer (3)

Teaching

24 undergraduate courses taught

29 graduate courses taught

Presentations

75+ invited, plenary or summary talks given

190+ colloquia and seminars given

presentations in 26 states and 23 countries

Schools
30+ lectures at 8 schools

Consulting
40+ presentations made

Conferences

150+ meetings attended

Publications

91. *Hybrid Hadrons: Origins and Development*, Eric S. Swanson. Submitted to EPJ-H (2026).

90. *Radiative transitions of hybrid mesons*, Shahriyar Jafarzade and Eric S. Swanson. Submitted to PRL (2026).

89. *When hadrons collide: di-J/ψ structure in the final state*, E.S. Swanson. Submitted to PRL (2026).

88. *On Dispersive and Nondispersive K-matrix Formalisms*, N. Hüsken, E.S. Swanson, and A. Szczepaniak. Phys. Rev. D **113** 116021 (2026).

87. *Strong Decays of the Light Exotic 0^{+-} and 2^{+-} Hybrid Mesons*, C. Farina and E.S. Swanson. EPJC , **86**, 189 (2026).

86. *Bottomonium meson spectrum with quenched and unquenched quark models*, M. Atif Sultan, Wei Hao, E.S. Swanson, Lei Chang. EPJA, **6**, 137 (2025).

85. *Coulomb confinement in the Hamiltonian limit*, S.M. David, W.A. Smith, A. Rodas, R.J. Perry, C. Fernández-Ramírez, E.S. Swanson, A.P. Szczepaniak. Phys. Rev. **D110**, 094509 (2024).

84. *Poles and Poltergeists in $e^+e^- \to D\bar{D}$ Data*, Nils Hüsken, Richard F. Lebed, Ryan E. Mitchell, Eric S. Swanson, Ya-Qian Wang, Chang-Zheng Yuan. Phys. Rev. **D109**, 114010 (2024).

83. *A Constituent Model of Light Hybrid Meson Decays*, C. Farina and E.S. Swanson. Phys. Rev. **D109**, 094015 (2024).

82. *Light Hybrid Meson Mixing and Phenomenology*, E.S. Swanson, Phys. Rev. **D107**, 074028 (2023).

81. *50 Years of Quantum Chromodynamics*, F. Gross *et al.*, Eur. Phys. J. A. **83**, 1125 (2023).

80. *The LHCb State $P^{\Lambda}_{\psi s}(4338)$ as a Triangle Singularity*, T.J. Burns and E.S. Swanson, Phys. Lett. B **838**, 137715 (2023).

79. *Charmonium spectrum in an unquenched quark model*, Sadia Kanwal, Faisal Akram, Bilal Masud, E.S. Swanson, Eur. Phys. J. A. **58**, 58, 219 (2022).

78. *Production of P_c state in Λ_b decays*, T.J. Burns and E.S. Swanson, Phys. Rev. D **106**, 054029 (2022).

77. *K-matrix Analysis of e^+e^- Annihilation in the Bottomonium Region*, N. Hüsken, R.E. Mitchell, and E.S. Swanson, Phys. Rev. D **106**, 094013 (2022).

76. *Experimental constraints on the properties of P_c states*, T.J. Burns and E.S. Swanson, Eur. Phys. J. A. **58** 4, 68 (2022).

75. *Comment on "Magnetic Fields Trump Oxygen in Controlling the Death of Erythro-Leukemia Cells"*, E.S. Swanson, Appl. Sci., **11**, 8391 (2021).

74. *Discriminating among interpretations for the $X(2900)$ states*, T.J. Burns and E.S. Swanson, Phys. Rev. D **103**, 014004 (2021).

73. *Kinematical Cusp and Resonance Interpretations of the $X(2900)$*, T.J. Burns and E.S. Swanson, Phys. Lett. **B813**, 136057 (2021).

72. *Heavy Hybrid Decays in a Constituent Gluon Model*, C. Farina, H. Garcia Tecocoatzi, A. Giachino, E. Santopinto, and E.S. Swanson, Phys. Rev. D **102**, no.1, 014023 (2020).

71. *Molecular Interpretation of the $P_c(4440)$ and $P_c(4457)$ States*, T.J. Burns and E.S. Swanson, Phys. Rev. **D100**, 114033 (2019).

70. *Decays and Spectrum of Bottom and Bottom-strange Mesons*, Ishrat Asghar, Bilal Masud, E.S. Swanson, Faisal Akram, M. Atif Sultan, Eur. Phys. J. A. **54**, 127 (2018).

69. *Heavy-Quark Hybrid Mass Splittings: Hyperfine and "Ultrafine"*, R.F. Lebed and E.S. Swanson, Few Body Syst. **59**, 53 (2018).

68. *Quarkonium h States As Arbiters of Exoticity*, R.F. Lebed and E.S. Swanson, Phys. Rev. **D96**, 056015 (2017).

67. *Heavy-Quark QCD Exotica*, R.F. Lebed, R.E. Mitchell, and E.S. Swanson, Prog. Part. Nucl. Phys. **93C**, 143 (2017).

66. *B and B_s Meson Spectroscopy*, S. Godfrey, K. Moats, and E.S. Swanson, Phys. Rev. **D94**, 054025 (2016).

65. *Interpreting the $X(5568)$*, T.J. Burns and E.S. Swanson, Phys. Lett. **B760**, 627 (2016).

64. *Issues and Opportunities with Exotic Hadrons*, R. Briceño *et al.*, Chin. Phys. **C40**, 042001 (2016).

63. *Cusps and Exotic Charmonia*, E.S. Swanson, Int. J. Mod. Phys. **E25**, 1642010. (2016).

62. *Hybrid Mesons*, C.A. Meyer and E.S. Swanson, Prog. Part. Nucl. Phys. **82**, 21 (2015).

61. *Physics Opportunities with Meson Beams*, W.J. Briscoe, M. Döring, H. Haberzettl, D.M. Manley, M. Naruki, I.I. Strakovsky, E.S. Swanson, Eur. Phys. J. **A51**, 129 (2015).

60. *Z_b and Z_c Exotic Mesons as Cusp Effects*, E.S. Swanson, Phys. Rev. **D91**, 034009 (2015).

59. *Molecular Interpretation of the Supercharmonium State $Z(4475)$*, T. Barnes, F.E. Close, and E.S. Swanson, Phys. Rev. **D91**, 014004 (2015).

58. *The Physics of the B Factories*, A.J. Beven *et al.*, Eur. Phys. J. **C74**, 11 (2014).

57. *The Gluon Propagator with Two-loop Schwinger-Dyson Equations*, J. Meyers and E.S. Swanson, Phys. Rev. **D90**, 045037 (2014).

56. *QED3 at Finite Temperature and Density*, P.M. Lo and E.S. Swanson, Phys. Rev. **D89**, 025015 (2014).

55. *Spin Zero Glueballs in the Bethe-Salpeter Formalism*, J. Meyers and E.S. Swanson, Phys. Rev. **D87**, 036009 (2013).

54. *Modelling DNA Response to THz Radiation*, E.S. Swanson, Phys. Rev. **E83**, 040901(R), (2011).

53. *Endemic Infrared Divergences in QED3 at Finite Temperature*, Pok Man Lo and E.S. Swanson, Phys. Lett. B **697**, 164 (2011).

52. *Parity Symmetry in QED3*, Pok Man Lo and E.S. Swanson; Phys. Rev. **D83**, 065006 (2011).

51. *Confinement Models at Finite Temperature and Density*, Pok Man Lo and E.S. Swanson; Phys. Rev. **D81**, 034030 (2010).

50. *Hadron Loops: General Theorems and Application to Charmonium*, T. Barnes and E.S. Swanson; Phys. Rev. **C77**, 055206 (2008).

49. *Charmonium-Nucleon Dissociation Cross Sections in the Quark Model*, J. Hilbert, N. Black, T. Barnes, and E.S. Swanson; Phys. Rev. **C75**, 064907 (2007).

48. *Canonical Interpretation of the $D_{sJ}(2860)$ and $D_{sJ}(2690)$*, F.E. Close, C.E. Thomas, O. Lakhina, and E.S. Swanson; Phys. Lett. **B647**, 159 (2007).

47. *A Canonical $D_s(2317)$?*, O. Lakhina and E.S. Swanson; Phys. Lett. **B650**, 159 (2007).

46. *Dynamic Properties of Charmonium*, O. Lakhina and E.S. Swanson; Phys. Rev. **D74**, 014012 (2006).

45. *Nucleon-Meson Coupling Constants and Form Factors in the Quark Model*, C. Downum, T. Barnes, J. Stone, and E.S. Swanson; Phys. Lett. **B638**, 455 (2006).

44. *The New Heavy Mesons: A Status Report*, E.S. Swanson; Phys. Rept. **429**, 243 (2006).

43. *Dynamics and Decay of Heavy Light Hadrons*, F.E. Close and E.S. Swanson; Phys. Rev. **D72**, 094004 (2005).

42. *Higher Charmonium*, T. Barnes, S. Godfrey, and E.S. Swanson; Phys. Rev. **D72**, 054026 (2005).

41. *Unquenching the Quark Model and Screened Potentials*, E.S. Swanson, J. Phys. G31, 845 (2005).

40. *Options for the SELEX State $D_{sJ}(2632)$*, T. Barnes, F.E. Close, J.J. Dudek, S. Godfrey, E.S. Swanson, Phys. Lett. **B600**, 223 (2004).

39. *Diagnostic Decays for the X(3872)*, E.S. Swanson, Phys. Lett. **B598**, 197 (2004).

38. *Hyperfine Meson Splittings: Chiral Symmetry versus Transverse Gluon Exchange*, F.J. Llanes-Estrada, S.R. Cotanch, A.P. Szczepaniak, and E.S. Swanson; Phys. Rev. **C70**, 042004 (2004).

37. *Short Range Structure in the X(3872)*, E.S. Swanson; Phys. Lett. **B588**, 189 (2004).

36. *A Coulomb Gauge Model of Mesons*, N. Ligterink and E.S. Swanson; Phys. Rev. **C69**, 025204 (2004).

35. *Parity Doubling in the Meson Spectrum*, E.S. Swanson; Phys. Lett. **B582**, 167 (2004).

34. *Hybrid Meson Potentials and the Gluonic van der Waals Force*, O. Lakhina and E.S. Swanson; Phys. Lett. **B582**, 172 (2004).

33. *The Low Lying Glueball Spectrum*, E.S. Swanson and A.P. Szczepaniak; Phys. Lett. **B577**, 61 (2003).

32. *Quark model dissociation cross sections of ground-state and excited charmonia on light mesons*, T. Barnes, E.S. Swanson, C.-Y. Wong, and X.-M. Xu; Phys. Rev. **C68**, 014903 (2003).

31. *Coulomb Gauge QCD, Confinement, and the Constituent Representation*, A.P. Szczepaniak and E.S. Swanson; Phys. Rev. **D65**, 025012 (2001).

30. *Heavy Quarkonium Dissociation Cross Sections in Relativistic Heavy Ion Collisions*, C.-Y. Wong, E.S. Swanson, and T. Barnes; Phys. Rev. **C65**, 014903 (2002).

29. *Meson-meson Scattering in the Quark Model: Spin Dependence and Exotic Channels*, T. Barnes, N. Black, and E.S. Swanson; Phys. Rev. **C63**, 025204 (2001).

28. *Chiral Extrapolation, Renormalization, and the Viability of the Quark Model*, A.P. Szczepaniak and E.S. Swanson; Phys. Rev. Lett. **87**, 072001 (2001).

27. *Nonperturbative Renormalization and the QCD Vacuum*, A.P. Szczepaniak and E.S. Swanson; Phys. Rev. **D62**, 094027 (2000).

26. *Cross Sections for π- and ρ-induced Dissociation of J/ψ and ψ'*, C.-Y. Wong, E.S. Swanson, and T. Barnes; Phys. Rev. **C62**, 04520 (2000).

25. *A Quark Model Calculation of $\gamma\gamma \to \pi\pi$ Including Final State Interactions*, H. Blundell, S. Godfrey, G. Hay, and E.S. Swanson; Phys. Rev. **C61**, 025203 (2000).

24. *BB Potentials from the Quark Model*, T. Barnes, N. Black, D. Dean, and E.S. Swanson; Phys. Rev. **C60**, 045202 (1999).

23. *Renormalized Effective QCD Hamiltonian: Gluonic Sector*, D.G. Robertson, E.S. Swanson, A.P. Szczepaniak, C.-R. Ji, and S.R. Cotanch; Phys. Rev. **D59**, 074019 (1999).

22. *Hybrid Meson Decay Phenomenology*, P.R. Page, E.S. Swanson, and A.P. Szczepaniak; Phys. Rev. **D59**, 034016 (1999).

21. *Heavy Hybrids with Constituent Gluons*, E.S. Swanson and A.P. Szczepaniak; Phys. Rev. **D59**, 014035 (1999).

20. *Decays of Hybrid Mesons*, E.S. Swanson and A.P. Szczepaniak; Phys. Rev. **D56**, 5692–5695 (1997).

19. *Higher Quarkonia*, T. Barnes, F.E. Close, P. Page, and E.S. Swanson; Phys. Rev. **D55**, 4157–4188 (1997).

18. *On the Dirac Structure of Confinement*, A.P. Szczepaniak and E.S. Swanson; Phys. Rev. **D55**, 3987–3993 (1997).

17. *From Current to Constituent Quarks: a Renormalization Group Improved Hamiltonian-based Description of Hadrons.*, A.P. Szczepaniak and E.S. Swanson; Phys. Rev. **D55**, 1578–1591 (1997).

16. *On the Mechanism of Open Flavor Strong Decays*, E.S. Ackleh, T. Barnes, and E.S. Swanson; Phys. Rev. **D54**, 6811-6829 (1996).

15. *Glueball Spectroscopy in a Relativistic Many-body Approach to Hadron Structure*, A. Szczepaniak, E.S. Swanson, C.-R. Ji, and S.R. Cotanch; Phys. Rev. Lett. **76**, 2011–2014 (1996).

14. *Hybrid and Conventional Mesons in the Flux Tube Model: Numerical Studies and their Phenomenological Implications*, T. Barnes, F.E. Close, and E.S. Swanson; Phys. Rev. **D52**, 5242–5256 (1995).

13. *Distinguishing Among Strong Decay Models*, P. Geiger and E.S. Swanson; Phys. Rev. **D50**, 6855–6862 (1994).

12. *Kaon-nucleon Scattering Amplitudes and Z^*-enhancements from Quark Born Diagrams*, T. Barnes and E.S. Swanson; Phys. Rev. **C49**, 1166–1184 (1994).

11. *NN Core Interactions and Differential Cross Sections from One Gluon Exchange*, T. Barnes, S. Capstick, M. Kovarik, and E.S. Swanson; Phys. Rev. **C48**, 539–552 (1993).

10. *On the excitation spectrum of Heisenberg spin ladders*, T. Barnes, E. Dagotto, J. Riera, and E.S. Swanson; Phys. Rev. **B47**, 3196–3203 (1993).

9. *Isgur–Wise symmetry in two dimensions*, M. Burkardt and E.S. Swanson; Phys. Rev. **D46**, 5083–5091 (1992).

8. *I=3/2 $K\pi$ scattering in the nonrelativistic quark potential model*, T. Barnes, E.S. Swanson, and J. Weinstein; Phys. Rev. **D46**, 4868–4872 (1992).

7. *Inter-meson potentials from the constituent quark model*, E.S. Swanson; Ann. Phys. (NY) **220**, 73–133 (1992).

6. *A diagrammatic approach to meson-meson scattering in the nonrelativistic quark potential model*, T. Barnes and E.S. Swanson; Phys. Rev. **D46**, 131–159 (1992).

5. *A prediction of spin-0 and -2 vector meson molecules: a new model of the $\theta(1720)$*, K. Dooley, E.S. Swanson, and T. Barnes; Phys. Lett. **B275**, 478–486 (1992).

4. *Spin-hole polaron of the t-J_z model*, T. Barnes, E. Dagotto, A. Morea, and E.S. Swanson; Phys. Rev. **B40**, 10977–10981 (1989).

3. *Critical behavior of the two-dimensional anisotropic Heisenberg antiferromagnet: A numerical test of spin-wave theory*, T. Barnes, K.J. Cappon, E. Dagotto, D. Kotchan, and E.S. Swanson; Phys. Rev. **B40**, 8945-8953 (1989).

2. *Evidence for a phase transition in the zero-temperature anisotropic two-dimensional Heisenberg antiferromagnet*, T. Barnes, D. Kotchan, and E.S. Swanson; Phys. Rev. **B39**, 4357– 4362 (1989).

1. *Two-dimensional Heisenberg antiferromagnet: A numerical study*, T. Barnes and E.S. Swanson; Phys. Rev. **B37**, 9405–9409 (1988).

Nonrefereed Publications

24. *Science and Society*, 2nd edition, E.S. Swanson and M.L. Good, Springer (2026).

23. *Strong Interaction Physics at the Luminosity Frontier with 22 GeV Electrons at Jefferson Lab*, A. Accardi *et al.*, [arXiv:2306.09360].

22. *The case for an EIC theory alliance*, R. Abir *et al.*, [arXiv:2305.14572].

21. *Substructure of Multiquark Hadrons (Snowmass 2021 White Paper)*, N. Brambilla *et al.*, [arXiv:2203.6583].

20. *Physics Opportunities with Meson Beams for EIC*, W. J. Briscoe, M. Döring, H. Haberzettl, D. M. Manley, M. Naruki, G. Smith, I. Strakovsky and E. S. Swanson, [arXiv:2108.07591 [nucl-ex]].

19. *Applied Computational Physics*, J.F. Boudreau and E.S. Swanson, Oxford University Press (2018).

18. *Robot Cars*, E. Swanson; Pittsburgh Post Gazette, Nov 1, 2015.

17. *Science and Society*, E.S. Swanson, Springer (2015).

16. *An initial study of mesons and baryons containing strange quarks with GlueX*, GlueX Collaboration, arXiv:1305.1523.

15. *A study of meson and baryon decays to strange final states with GlueX in Hall D*, GlueX Collaboration, arXiv:1210.4508.

14. *Why the Higgs Particle Matters*, E. Swanson; Pittsburgh Post Gazette, July 8, 2012.

13. *These Studies are Killing Me!*, E. Swanson; Pittsburgh Post Gazette, July 24, 2011.

12. *Cell Phone Activation and Brain Glucose Metabolism*, A. Kosowsky, E. Gerjuoy, and E. Swanson, JAMA, **305**, 2066 (2011).

11. *Keep Your Hands off my Theory!*, E. Swanson; Pittsburgh Post Gazette, Jan 9, 2011, pg B1.

10. *We can't run and we can't hide*, E. Swanson; Pittsburgh Post Gazette, Sept 27, 2009, pg B1.

9. *Stop Freaking Out About Cell Phones!*, E. Swanson; Pittsburgh Post Gazette, Aug 3, 2008, pg G1.

8. *Proceedings of the First Meeting of the APS Topical Group on Hadronic Physics*, Eds. T. Barnes, S. Godfrey, A. Petrov, and E.S. Swanson.

7. *QCD Szuka Czastek Egzotyczych*, A. Dzierba, C. Meyer, E.S. Swanson; Postepy Fizyki **156**, 20 (2005). (Polish translation of *The Search for QCD Exotics*).

6. *Proceedings of the Workshop on the Physics of Excited Nucleons*, Eds. S.A. Dytman and E.S. Swanson; (World Scientific, Hong Kong, 2003).

5. *Particle Portraits: Review of The Particle Odyssey*, E. Swanson; American Scientist **91**, 178 (2003).

4. *Rumsfeld's Folly: National Missile Defense*, E. Swanson; Pittsburgh Post Gazette, Jan 14, 2001, pg B4.

3. *Key Issues in Hadronic Physics*, S. Capstick, S. Dytman, R. Holt, X.-D. Ji, J. Negele, and E. Swanson; hep-ph/0012238.

2. *The Search for QCD Exotics*, A. Dzierba, C. Meyer, and E.S. Swanson; American Scientist **88**, 406 (2000).

1. *Review of Introduction to Gauge Theory*, E.S. Swanson; Contemp. Phys. **28** (1987) 432.

Conference Proceedings

63. *Experimental Tests and Interpretations of the $X(2900)$*, E.S. Swanson, Proceedings of EuroQCD 2020, Oct 27-30, 2020. To appear Progress in Nuclear and Particle Physics.

62. *Theory Overview: models for XYZ states*, E.S. Swanson, Proceedings of Hadron 2015, Newport News, VA. To appear in AIP Conf Proc.

61. *Progress and Issues in Theoretical Hadron Physics*, E.S. Swanson, Proceedings of Hadron 2013, Nara, Japan, 2013. To appear in PoS. arXiv:1401.3914.

60. *Glueballs in the Bethe-Salpeter Formalism*, E.S. Swanson, Proceedings of Excited QCD, Sarajevo, Bosnia, 2013.

59. *Can the Constituent Quark Model Describe the Pion?*, E.S. Swanson, Proceedings of the XXXIII Erice School of Nuclear Physics, Erice, Italy, 2011. Prog. Nucl. Part. Phys. **67**, 365 (2012).

58. *Heavy Flavour Spectroscopy*, E.S. Swanson, Proceeding of the 23rd Rencontres de Blois, Blois, France, 2011.

57. *QED3 at finite temperature*, E.S. Swanson and P.M. Lo, Proceedings of Excited QCD, Les Houches, France, 2011. Acta Phys. Polon. Proc. Suppl. **4**, 603, 2011.

56. *QED in three dimensions and at finite temperature*, E.S. Swanson and P.M. Lo, XLIX International Winter Meeting on Nuclear Physics, Bormio, Italy, 2011.

55. *A Primer on Functional Methods and the Schwinger-Dyson Equations*, E.S. Swanson, arXiv:10084337, XI Hadron Physics School Proceedings, Maresias, Brazil, 2010. AIP. Conf. Proc. **1296**, 75 (2010).

54. *Confinement Models at Finite Temperature and Density*, P.M. Lo and E.S. Swanson, Proceedings of Excited QCD 2010, Tatranska Lomnica, Slovakia, 2010. Acta Phys. Polon. Supp. **3**, 797 (2010).

53. *QCD Beyond the Standard Model*, E.S. Swanson, Proceedings of Excited QCD 2010 (Acta Phys. Polon.), Tatranska Lomnica, Slovakia, 2010. Acta. Phys. Polon. Supp. **3**, 991 (2010).

52. *Confinement Models at Finite Temperature and Density*, P.M. Lo and E.S. Swanson, Proceedings of Hadron 2009, Tallahassee, FL, 2010. AIP Conf. Proc. **1257**, 671 (2010).

51. *Hadronic Physics: an Outlook*, E.S. Swanson, Proceedings of Hadron 2009, Tallahassee, FL, 2010. AIP Conf. Proc. **1257**, 229 (2010).

50. *Nucleon-Nucleon Interactions from the Quark Model*, C. Downum, J.R. Stone, T. Barnes, E.S. Swanson, and I. Vidaña, Proceedings of Hadron 2009, Tallahassee, FL, 2010. AIP Conf. Proc. **1257**, 538 (2010).

49. *Hadron Spectroscopy – Theory*, E.S. Swanson, Proceedings of DPF-2009, Detroit MI, 2009. [eConf C090726] [arXiv:0910.3704]

48. *Unquenching, Requenching, and Renormalising the Quark Model*, E.S. Swanson, Proceedings of Charmed Exotics, the 447th Wilhelm and Else Heraeus Seminar, Bad Honnef, Germany, 2009. [arXiv:0910.3165].

47. *Unquenching and Requenching the Quark Model*, E.S. Swanson, Proceedings of Excited QCD Workshop, Zakopane, Poland, 2009. Acta Phys. Polon. B

46. *Heavy Charmonium Mini Review*, E.S. Swanson, Proceedings of Rencontres de Moriond, QCD Session, La Thuile, Italy, 2009.

45. *Heavy Exotica Mini Review*, E.S. Swanson, Proceedings of PANIC09, Eilat, Israel, 2009; Nucl. Phys. **A827**, 284 (2009).

44. *A Canonical D_s Spectrum*, E.S. Swanson, Proceedings of GHP06, Nashville, Oct 22-24, 2006; J. Phys. Conf. Ser. **69**, 012007 (2007).

43. *A Canonical D_s Spectrum*, E.S. Swanson, Proceedings of Confinement VII, Ponta Delgada, Azores, Sept 2-7, 2006. AIP Conf. Proc. **892**, 362 (2007).

42. *The New Heavy Mesons*, E.S. Swanson, Proceedings of the Conference on the Intersection of Particle and Nuclear Physics, Puerto Rico, May 30 - June 3, 2006. AIP Conf. Proc. **870**, 349 (2006).

41. *Review of Heavy Hadron Spectroscopy*, E.S. Swanson, Proceedings of the International Conference on Hadron Spectroscopy, Rio de Janeiro, Aug 21-26, 2005. AIP Conf. Proc. **814**, 203 (2005).

40. *Review of Heavy Hadron Spectroscopy*, E.S. Swanson, Proceedings of the International Conference on QCD and Hadronic Physics, Beijing, June 16-20, 2005. [hep-ph/0509327]. Int J. Mod. Phys. **A21** 733 (2006).

39. *$\bar{D}D^*$ and $\bar{D}^*D^*$ Molecules*, E.S. Swanson, Proceedings of the First Meeting of the APS Topical Group on Hadronic Physics, Fermilab, 24-26 October, 2004. J. Phys. Conf. Ser. **9**, 79 (2005).

38. *Is the X(3872) a Meson Molecule?*, E.S. Swanson, Proceedings of the International Conference on High Energy Physics, Beijing, China, 16-22 August, 2004.

37. *Strong Decays of Charmonia*, E.S. Swanson, Proceedings of the Second PANDA Physics Workshop, Frascati, Italy, 18-19 March, 2004.

36. *The Flux Tube Model: Applications, Tests, and Extensions*, E.S. Swanson, Proceedings of the Workshop on Gluonic Excitations, Newport News, Virginia, 14-16 May 2003, [hep-ph/0311328].

35. *Chiral Symmetry and Hyperfine $q\bar{q}$ Splittings*, F.J. Llanes-Estrada, S.R. Cotanch, A.P. Szczepaniak, and E.S. Swanson, Proceedings of International Europhysics Conference on High-Energy Physics, Aachen, Germany, 17-23 Jul 2003, [hep-ph/0311246]. Eur. Phys. J. **C33**, S521 (2004).

34. *Aspects of Confinement: a Brief Review*, E.S. Swanson, Proceedings of the Tenth International Conference on Hadron Spectroscopy, Aschaffenburg, Germany, Aug 31- Sept 6, 2003, [hep-ph/0310089].

33. *Hadronic Structure from QCD*, E.S. Swanson, Proceedings of the International Symposium on Hadron Spectroscopy, Chiral Symmetry, and the Relativistic Description of Bound States, Nihon University, Tokyo, Feb 24-26, 2003.

32. *Synopsis of the Focus Session on the Short Range Structure of Hadrons*, E.S. Swanson, Proceedings of the Workshop on the Physics of Excited Nucleons, Pittsburgh PA, October 9-12, 2002 (World Scientific).

31. *The Role of Produced Hadrons in J/psi Suppression*, Cheuk-Yin Wong, T. Barnes, E.S. Swanson, and H.W. Crater, Proceedings of Quark Matter Conference, Nantes, France, July 18-24, 2002, [nucl-th/0209017]. Nucl. Phys. **A715**, 541 (2003).

30. *Hadronic Spectral Function and Charm Meson Production*, D. Blaschke, G. Burau, T. Barnes, Yu. Kalinovsky, and E.S. Swanson, Proceedings of the Workshop on Quark and Hadron Dynamics, Budapest, March 3-7, 2002, [hep-ph/0210265]. Heavy Ion Physics **18**, 49 (2003)

29. *Constructing Confinement*, E.S. Swanson and A.P. Szczepaniak, 2002 Lake Louise Winter Institute, Feburary 17-23, 2002, Lake Louise, Alberta. (World Scientific) [hep-ph/0205079].

28. *Dissociation of a Heavy Quarkonium at $T < T_c$*, C. Y. Wong, T. Barnes, E. S. Swanson, H. W. Crater, Workshop on the Physics of the Quark-Gluon Plasma, September 4-7, 2001, Palaiseau, France, [nucl-th/0112023].

27. *Beyond the Constituent Quark Model*, E.S. Swanson, 9th International Conference on Hadron Spectroscopy, Protvino, Russia, 25 Aug - 1 Sept 2001, [hep-ph/0110418].

26. *Chirality and the Quark Model*, E.S. Swanson and A.P. Szczepaniak, 9th International Conference on Hadron Spectroscopy, Protvino, Russia, 25 Aug - 1 Sept 2001. AIP Conf. Proc. **619**, 727 (2002).

25. *Hadron-Hadron Interactions in the Constituent Quark Model: Results and Extensions*, E.S. Swanson, Structure of Hadrons: 29th International Workshop on Gross Properties of Nuclei and Nuclear Excitations, Hirschegg, Austria, 14-20 Jan 2001.

24. *Studies of Coulomb Gauge QCD*, A.P. Szczepaniak and E.S. Swanson, Seventh International Conference on the Intersections of Particle and Nuclear Physics, Quebec, May 22-28, 2000. AIP Conf. Proc. **549**, 330 (2002).

23. *Charmonium plus Light Hadron Cross Sections*, T. Barnes, E.S. Swanson, and C.-Y. Wong, Fifth International Workshop on Heavy Quark Physics, Dubna, Moscow Region, Russia, 5-9 Apr 2000.

22. *Cross Sections for the Dissociation of J/ψ and ψ' by π and ρ at low Energies*, C.Y. Wong, E.S. Swanson, and T. Barnes, 28th International Workshop on Gross Properties of Nuclei and Nuclear Excitation: Hadrons in Dense Matter, Hirschegg, Austria, 16-22 Jan 2000.

21. *Heavy Hybrids in a Constituent Glue Model*, E.S. Swanson, Proceedings of the QCD Euroconference, July 7 – 13, 1999, Montpellier, France. Nucl. Phys. Proc. Suppl. **86**, 393 (2000).

20. *Solving the QCD Hamiltonian for Bound States*, E. Gubankova, E.S. Swanson, C. Ji, and S. Cotanch, Eleventh International Light Cone School and Workshop, Seoul, South Korea, May 26-June 6, 1999. AIP Conf. Proc. **494** 301 (1999).

19. *Science Goals of Hall D*, E.S. Swanson, Proceedings of Rensselaer-JLab Workshop on a New Facility for High Energy Photoproduction, March 11 – 13, 1999.

18. *Developing the Dynamical Quark Model*, D.G. Robertson *et al.*, Proceedings of Confinement III, Newport News, VA, June, 1998.

17. *Soft Glue and the Dirac Structure of Confinement*, E.S. Swanson, Proceedings of Confinement III, Newport News, VA, June, 1998.

16. *Searching for Soft Glue: Hybrids and Glueballs*, E.S. Swanson, Proceedings of the JLab Conference on Physics and Instrumentation with 6-12 GeV Beams, Newport News VA, June, 1998.

15. *Final State Interactions*, E.S. Swanson, Proceedings of the CMU/JLab Workshop on Physics with 8+ GeV Photons, March 1998, CMU (CEBAF).

14. *Heavy Hybrids*, E.S. Swanson and A.P. Szczepaniak, Proceedings of the NCSU/JLab Workshop on Hybrids and Photoproduction Physics, November, 1997, NCSU (CEBAF).

13. *QCD Exotica: Theory Perspectives*, E.S. Swanson, Proceedings of Hadron 97, August 1997, Brookhaven National Laboratory. AIP Conf. Proc. **432**, 471 (1998).

12. *QCD Hamiltonian Approach to the Glueball Spectrum*, S.R. Cotanch, A.P. Szczepaniak, E.S. Swanson, and C.-R. Ji, Proceedings of Few Body XV, July, 1997, Groningen; Nucl. Phys. **A631**, 640c (1998).

11. *Assiette de Colle*, E.S. Swanson, Proceedings of the IUJL Workshop on Physics with 8+ GeV Photon Beams, July, 1997, Bloomington IN (CEBAF).

10. *Hybrids and Quark Confinement*, E.S. Swanson, Proceedings of the QCD Euroconference, July 3-9, 1997, Montpellier, France; Nucl. Phys. B Proc. Suppl. **64**, 312 (1998).

9. *Glueball Spectroscopy in a Many-body QCD Hamiltonian Approach*, S.R. Cotanch, A. Szczepaniak, E.S. Swanson, and C.R. Ji, Proceedings of the 6th Conference on Intersections of Particle and Nuclear Physics, May 1997, Montana, USA (AIP,1997).

8. *Hybrids and Quark Confinement*, E.S. Swanson, Proceedings of the Conference on Perspectives in Hadronic Physics, May 12-16, 1997, ICTP, Trieste, Italy, (World Scientific); Nucl. Phys. Proc. Suppl. **64**, 312 (1998).

7. *QCD and Hadronic Physics*, E.S. Swanson, Proceedings of the Fourth Biennial Conference on Low Energy Antiproton Physics (LEAP 96), August 27-31, 1996, Dinkelsbühl, Germany; Nucl. Phys. B Proc. Suppl. **56**, 166 (1997).

6. *QCD Hamiltonian Approach to the Glueball Spectrum*, S.R. Cotanch, A.P. Szczepaniak, E.S. Swanson, and C.-R. Ji, Proceedings of the International Workshop on Quark Confinement and the Hadron Spectrum, July, 1996, Como, Italy (World Scientific).

5. *A Relativistic, Many-body, QCD-based Model of Glueballs*, A. Szczepaniak and E.S. Swanson, Proceedings of Hadron '95, July 10-14, 1995, Manchester, UK.

4. *Hybrid and Conventional Mesons in the Flux Tube Model*, E.S. Swanson, Proceedings of Hadron '95, July 10-14, 1995, Manchester, UK.

3. *I=0,1 $\pi\pi$ and I = 1/2 $K\pi$ scattering using quark Born diagrams*, Z. Li, M. Guidry, T. Barnes, and E.S. Swanson.

2. $\gamma\gamma \to \pi\pi$ *and VV*, E.S. Swanson, Proceedings of Hadron '93, Villa Olmo, Como, Italy; Nuovo Cim., **107A**, 2367 (1994).

1. *Inter-meson potentials*, E.S. Swanson; Proc. of the 12'th Annual MRST Meeting, May 14-15, 1990, Montreal, Quebec, Canada.

Grants

dB-SERC grant	2024 – 2025
DOE grant (renewal)	2024 – 2027
DOE grant (Topical Collaboration)	2028
dB-SERC grant	2023 – 2024
DOE grant DE-SC0019232 (renewal)	2021 – 2023
DOE grant DE-SC0019232	2018 – 2021
DOE grant DE-FG02-00ER41135 (renewal)	2013 – 2014
DOE grant DE-FG02-00ER41135 (renewal)	2010 – 2013
DOE grant DE-FG02-00ER41135 (renewal)	2007 – 2010
DOE grant DE-FG02-00ER41135 (renewal)	2004 – 2007
PPARC (UK) Fellowship	2004 – 2005
NSF grant NSF-PHY-0244668	2003 – 2005
DOE grant DE-FG02-00ER41135 (renewal)	2002 – 2004
NSF/DAAD travel grant (Germany)	2001 – 2003
DOE grant DE-FG02-00ER41135	2000 – 2002
DOE grant DE-FG02-96ER40944 (renewal)	1999 – 2000
NSF travel grant (Portugal)	1999 – 2001
DOE grant DE-FG02-96ER40944	1996 – 1999
NSF travel grant (Poland)	1996 – 1998
Faculty Research and Professional Development Award	1995

Mentoring – Faculty

Andrew Mugler	assistant professor	2026

Mentoring – Postdocs

Shahriyar Jafarzade	2026-2027	
Fatima Machado	2015-2016	→ Federal University of Santa Catarina, Brazil
Yasser Mustafa	2010-2011	→ South Valley University, Egypt
Bilal Masud	2007-2008	→ University of the Punjab, Pakistan
Pieter Maris	2003-2006	→ Iowa State
Norbert Ligterink	2001-2003	→ Twente University
Elena Gubankova	1998-2000	→ MIT
David Robertson	1996-1998	→ Otterbein University
Adam Szczepaniak	1994-1996	→ Indiana University, Bloomington

Mentoring – Students

Colin Henchy	UG	2023 - 2024		
Christian Farina	PhD	2018-2023		professor at UIUC
Moustafa Ismail	GSR	2022		Assiut University
Joseph Meyers	PhD	2010-2014		industry
Pok Man Lo	PhD	2006-2011	(a)	professor at Wroclaw
John Hilbert	MSc	2004-2008		industry
Olga Lakhina	PhD	2002-2006	(b)	Kent State
Adam Drake	Grad	2002-2003		industry
Malik Barret	UG	2002		

Andew McQuiston	UG	2001		Pitt
Jonathan Mines	Grad	2001		industry
Quentin Bailey	UG	2001	(c)	IUB
Katja Waidelich	MSc	2000		Karlsruhe
Michael Binger	UG	1999		Stanford
Louis Elliot	MSc	1998		industry
Tavis Cole	UG	1997		industry

(a) recipient of Mellon Fellowship
(b) recipient of Warga Fellowship
(c) recipient Halliday-Resnick UG Research Award

Mentoring – PhD Committees

Youle Su	Pitt	2026-	Han
Jiawei Guo	CMU	2026	Meyer
Karim Ehteshamul	Pitt	2024-	Surukuchi
Hao Li	CMU	2023	Schumacher
Yue Guo	Pitt	2017-2022	Wu
Daniel Perrefort	Pitt	2018-2021	Wood-Vasey
Bijit Singha	CMU	2018-2019	Kisslinger
Zixin Yang	Pitt	2017-2020	Leibovich
Ben Messerly	Pitt	2015-2019	Paolone
Jun Mou Chen	Pitt	2014-2017	Han
Andrew Hanlon	CMU	2014-2017	Morningstar
Kai Zhang	Pitt	2013-2018	Dutt
Fei Ding	Pitt	2010-2010	Salman
Brandon Eberly	Pitt	2009-2013	Dytman
Yi-Cheng Huang	Pitt	2009-2012	Freitas
Tuba Altindal	Pitt	2009-2012	Wu
Stephen Pellathy	Pitt	2009	Koehler
Vanita Srinivasa	Pitt	2008-2012	Levy
Xiaohui Liu	Pitt	2007-2011	Leibovich
Suresh Maran	Pitt	2002-2004	Newman
Haluk Denizli	Pitt	2001-2003	Mueller
Arie Baratt	Pitt	2001-2004	Thompson
Andy Hary	CMU	2001-2005	Quinn

Mentoring – External Examiner

Zachary Baldwin	CMU	2026	Meyer
Ansari Nasimbhai	Gujarat	2026	Rai
Dene Hoffman	CMU	2025	Schumacher
Zaki Ahmad	Punjab	2024	Masud
Sohail Gilani	Punjab	2017	Masud
Faisal Akram	Punjab	2013	Kamran
David Lenkner	CMU	2013	Morningstar
M. Imran Jamil	Punjab	2012	Masud
Nosheen Akbar	Punjab	2012	Masud
John Bulava	CMU	2009	Morningstar

Filipe Llanes Estrada	NCSU	2000	Cotanch
Philip Koran	CMU	2000	Meyer

Service – Outreach

`public forum:` *Pseudoscience and Science*, Science Revealed, April 1, 2025.

`article:` *'Science Revealed' takes on ever-increasing pseudoscience*, University Times, March 21, 2025.

`article:` *Breaking down Connor McDavid's brilliant Game 6 goal against the Dallas Stars*, Edmonton Journal, June 14, 2024.

`article:` *"I'd love for Bigfoot to exist. He seems like he'd be great at a party": New course module helps students analyze pseudoscientific claims*, The Pitt News, Feb 26, 2024.

`article:` *New Learning Module will look at Roots of Pseudoscience*, University Times, Feb 9, 2024.

`CHP lecture:` *The Particle Explosion*, Nov 2023.

`article:` *Posts tie US emergency alert to vaccine conspiracy theories*, AFP Fact Check, Oct 2023.

`REYES lecture:` *Fake Science*, Aug, 2023.

`REYES lecture:` *The Particle Explosion*, June, 2023.

`feature article:` *Mød Multikvarkerne*, Christian Bierlich, Illustretet Videnskab, 7-2023.

`interview:` *5G in New York City*, W/ Lee Collins, March 30, 2023.

`article:` *Team of physicists find signs of pentaquark states and new matter*, Phys.org, Sept 26, 2022.

`article:` *Physics prof debunks concerns about harmful effects of communications towers*, Valley Courier, June 28, 2021.

`article:` *Is 5G going to kill us all?*, The New Republic, May 8, 2020.

`article:` *Crossed lines on wireless technology*, One Illinois, Aug 29, 2019.

`interview:` *Worried about 5G's Health Effects? Don't Be*, Wired.com, Dec 18, 2019.

`letter:` *5G is Safe, Improves Connectivity*, Newport Beach Independent, Nov 4, 2019.

`interview:` *The Quintuple is the Almost-impossible Future of Figure Skating*, Inverse.com, Feb 17, 2018.

`contribution:` *Should Kids Have Cell Phones? Experts Pick Sides*, WalletHub.com, Jan 6, 2017.

`interview:` *Exotic New Atom Found in Nine Year Old Data*, Nova Next, PBS, Oct 13, 2016.

`interview:` *The Social Life of Quarks*, Science, Jan 14, 2016.

`op-ed:` *Robot Cars*, Pittsburgh Post Gazette, Nov 1, 2015.

`interview:` *Glueballs are the missing frontier of the Standard Model*, Ars Technica, October 21, 2015.

`interview:` *Pentaquarks make their Debut*, Scientific American, Sept 15, 2015.

`interview:` *CERN Scientists Claim Discovery of New Particles*, NY Times, July 14, 2015.

`interview:` *The big bang blip: Solving the mystery of why matter exists*, New Scientist, May 20, 2015.

`interview:` *'Indisputable' Proof Of A New Four-Quark Particle*, Popular Science, Apr 10, 2014.

interview: NPR Science Friday, episode aired Feb 7, 2014.

op-ed: *New Particle Hints at Four-Quark Matter*, APS Physics Viewpoint, June 17, 2013.

interview: *Mysterious Subatomic Particle May Represent Exotic New Form of Matter*, Wired, June 2013.

public lecture: *Cell Phones and Cancer*, University of the Punjab, March 28, 2013.

interview: *The Cold Hard Facts*, Pittsburgh Post Gazette, Dec 23, 2012.

op-ed: *Why the Higgs Particle Matters*, Pittsburgh Post Gazette, July 8, 2012.

interview: *The Daily Q: Is the NYPD's new gun detection scanner safe?*, The New York World, Jan 19, 2012.

public lecture: *Pseudoscience*, First Unitarian Church Forum, Pittsburgh, Jan. 15, 2012.

public lecture: *Pseudoscience*, University of Pittsburgh Secular Alliance, Oct. 19, 2011.

public lecture: *Cell Phones and Cancer*, Pittsburgh Science Center, Sept. 6, 2011.

op-ed: *These Studies are Killing Me!*, E. Swanson; Pittsburgh Post Gazette, July 24, 2011.

article: *Pitt professors blast study linking brain, cell phone usage*, Pittsburgh Post Gazette, May 26, 2011.

article: *Pitt Scientists Among Those Challenging Cellphone Research*, Pittsburgh Tribune-Review, May 26, 2011.

high school lectures: *Cell Phones and your Brain*, CAPA High School, Pittsburgh, May, 2011.

public lecture: *Cell Phones, Body Scanners, and Cancer*, Moon Township Public Library, May, 2011.

radio interview: *The World Revealed*, WRCT 88.3 FM, 6:00-7:00, April 26, 2011.

interview: interview with Eureka High School (St. Louis) student, Kim Beeson, concerning cell phones, March 2011.

public lecture: *Cell Phones, Body Scanners, and Cancer*, Café Scientifique, Pittsburgh Science Center, March, 2011.

op-ed: *Keep Your Hands off of my Theory!*, E. Swanson; Pittsburgh Post Gazette, Jan 9, 2011, pg B1.

high school visit: organised an Allderdice High School visit to Physics and Astronomy, May 19, 2010.

web site: *Are Cell Phones Safe?*, www.ProCon.org, Feb 2010.

high school lecture (organizer, with Gavin Schmidt): *Climate Change*, CAPA High School, Pittsburgh, Feb 16, 2010.

artistic collaboration: scientific advisement for Cindy Snodgrass, windsphere.org, Oct 2009.

interview: *Tweeting up a Storm*, Pittsburgh Post Gazette, Oct 16, 2009, pg E1.

interview: *Focus on APS Topical Groups*, APS News, Oct. 2009.

web site: *Science Stew*, science issues blog at www.sciencestew.com, 2009.

op-ed: *We can't run and we can't hide*, E. Swanson; Pittsburgh Post Gazette, Sept 27, 2009, pg B1.

`high school lecture:` *Particles and Fields*, CAPA High School, Pittsburgh, June 2, 2009.

`interview:` *Exotic Arrival*, Frontline Magazine, **26-10**, May 9-22, 2009.

`radio interview:` *Pittsburgh Focus*, WISH-FM, WJAS, WPTT, Aug 10, 2008.

`radio interview:` *News*, WISH-FM, WJAS, WPTT, Aug 8, 2008.

`op-ed:` *Stop Freaking Out About Cell Phones!*, E. Swanson; Pittsburgh Post Gazette, Aug 3, 2008, pg G1.

`interview:` *Physicists Spot Unusual Charged Meson*, Physics World, Nov. 15 (2007).

`public lecture:` *Constructing Quarks*, Allegheny Observatory, March 2006.

`interview:` *Starting from Square One*, Science News **166**, 90 (2004).

`interview:` *Misbehavin' Mesons*, Science News **165**, 403 (2004).

`artistic collaboration:` scientific advisement for Jonathan Leaf, Jefferson Gallery, Pittsburgh, Jan. 2004.

`web site:` *An Introduction to Percolation*, multimedia eduction web site at www.merlot.org, Jan. 2003. *This site is the number one (non-wiki) hit on google for 'percolation'.*

`interview:` *New Hadron Physics Topical Group Approved*, APS News, Jan. (2002).

`op-ed:` *Rumsfeld's Folly: National Missile Defense*, E. Swanson; Pittsburgh Post Gazette, Jan 14, 2001, pg B4.

`popular article:` *The Search for QCD Exotics*, A. Dzierba, C. Meyer, and E.S. Swanson; American Scientist **88**, 406 (2000).

Service – Departmental and University

- Baranger Excellence in Teaching Award judge, 2026.
- AI Committee, 2026 –.
- A&S Tenure Review Committee, 2025 –.
- Undergraduate Committee, 2025 – 2026.
- Graduate Curriculum Committee, 2025 – 2026.
- Dean's ad hoc Appeals Committee (Econ), Sept, 2023.
- Graduate Curriculum Committee, 2022 – 2024.
- Dean's ad hoc Review Committee for Promotion (Chem), Apr, 2023.
- Dean's ad hoc Review Committee for Promotion (Chem), Dec, 2022.
- Dean's ad hoc Review Committee for Promotion (Stats), Dec, 2022.
- Pitt Momentum Funds Scaling Grants review, 2022.
- Dietrich School Tenure Council, 2022.
- Dean's ad hoc Review Committee for Promotion (Anth), April, 2021.
- Department Chair Election Committee, 2020.
- Graduate Studies Workflow Modernization Project (chair), 2020 –2021.
- Thomas-Lain Prize Committee (chair), 2017 – 2023.
- external examiner for Graduate School of Public Health, 2018.
- Graduate Admissions Committee, 2017 – 2019.
- Phys+Comp Undergraduate Degree (chair), 2017.
- Graduate Student Advisor, 2017 – 2019.
- Chair Election Committee (chair), 2017.
- English Proficiency Exams, 2017.
- "Day for Admitted Dietrich School Students" lecturer, April, 2016.
- Faculty Assembly member, 2015 – 2018.

- A&S Tenure Review Committee, 2011 – 2014.
- Graduate Computing Committee, 2010 – 2017.
- IT Committee (chair), 2007 – 2014.
- Web Content Committee (chair), 2007 – 2014.
- office staff hiring assistance, 2007.
- IT Committee, 2006 – 2007.
- ESL testing, 2006.
- LON-CAPA coordinator, 2006.
- Introductory textbook committee, 2004–2008.
- Recitation Committee (chair), 2004–2005.
- Graduate Admissions Committee, 2002–2003.
- Graduate Recruitment Committee, 2002–2003.
- Medium Energy Seminar Series organizer, 2000–2004.
- Departmental Web Page Upgrade, 2000–2002.
- Course and Curriculum Committee, 1999.
- Undergraduate Scholarship and Recruiting Committee, 1998.
- Post Tenure Review Ad Hoc Committee, 1998.
- TNT Seminar Series Organizer, 1998.
- Computational Physics Minor Ad Hoc Committee, 1998.
- Computing Committee, 1997, 1998, 1999.
- Colloquium Committee, 1996-1997.
- MIT-LNS Computing Strategy Task Force.

Service – Review Committees

- DOE INCITE Panel Review (virtual), Sept 14, 2025.
- DOE INCITE Panel Review (virtual), Sept 20, 2024.
- DOE INCITE Panel Review (virtual), Sept 20, 2023.
- DOE INCITE Panel Review (virtual), Sept 19, 2022.
- NSF nuclear theory Panel Review (virtual), Mar 30-31, 2022.
- DOE INCITE Panel Review, (virtual), Sept 20, 2021.
- DOE INCITE Panel Review, (virtual), Sept 14, 2020.
- DOE INCITE Panel Review, Arlington VA, Sept 9, 2019.
- DOE INCITE Panel Review, Arlington VA, Sept 12, 2018.
- DOE Office of Science Graduate Student Research, 2015, 2016.
- LQCD-ext II Panel Review, Jefferson Laboratory, VA, June 28-29, 2016.
- JLab JPAC Review, May 3-4, 2016.
- Jefferson Laboratory Science and Technology Review, JLab, VA, July 28-30, 2015.
- LQCD-ext II Panel Review, Brookhaven National Laboratory, NY, May 21-22, 2015.
- SciDAC Panel Review, Gaithersburg, MD, Apr 14-15, 2015.
- Nuclear Theory Ranking Panel, Arlington VA, Jan 20-22, 2010 [NSF].
- National Laboratory Nuclear Theory Review, Germantown MD, Sept 16-18, 2009 [DOE].
- Jefferson Lab Science and Technology Review, JLab VA, July 14-16, 2009 [DOE].
- USQCD initiative, FNAL IL, June 4-5, 2009 [DOE].
- SciDAC-2 USQCD lattice infrastructure grant, Washington DC, Jan 8-9, 2009 [DOE].

Service – National

- reviewer, DOE Office of Science, Graduate Student Research Program, 2026.
- Spokesperson, DOE ExoHad topical collaboration, 2023-2026.
- reviewer for DOE Early Career Award, 2022.
- reviewer for DOE Early Career Award, 2021.
- organizer (local) for MENU, June 2-7, 2019.

- member, APS Topical Group on Hadronic Physics, Fellowship Committee, 2018.
- reviewer for DOE Early Career Award, 2018.
- organizer (local) for Fall APS DNP Meeting, Oct 25-28, 2017.
- organizer (local) for B2TiP, May 23-25, 2016.
- convener for PWA8/ATHOS2, April, 2015.
- reviewer for *APS, Physics*, May, 2013.
- reviewer for DOE SciDac Proposals, Mar 2012.
- member, APS Topical Group on Hadronic Physics, Fellowship Committee, 2012.
- session organizer, DPF 2009, Wayne State University, July 26-31, 2009.
- editor, Proceedings of GHP06 (IoP conference proceedings).
- session organizer, Heavy Quarkonium 2006, BNL.
- session organizer, Joint DPF – JPS Conference, Honolulu, 2006.
- co-organizer, GHP06, Nashville, 2006.
- past chair, APS Topical Group on Hadronic Physics, 2005.
- co-organizer, GlueX–Cleo-c Meeting, Washington, 2005.
- co-organizer, First Meeting of the GHP, Fermilab, 2004.
- chair, APS Topical Group on Hadronic Physics, 2003-2004.
- session chair, APS April Meeting, Philadelphia, 2003.
- organizer, joint DPF/GHP session at the APS April Meeting, Philadelphia, 2003.
- local organizer, Workshop on Partial Wave Analysis, CMU, June, 2002.
- vice Chair, APS Topical Group on Hadronic Physics, 2002.
- member local organizing committee, N*2002, Pittsburgh, Oct, 2002.
- founder of the APS Topical Group on Hadronic Physics (GHP).
- member DNP (APS) nominations committee, 2001.
- program committee member, Workshop on Prospects for CLEO/CESR, May 5-6, 2001.
- Editor of *Key Issues in Hadronic Physics* White Paper.
- Co-organizer, Key Issues in Hadronic Physics, Sanderling, NC, Nov 5-10, 2000.
- Session Convener, Seventh Conference on the Intersections of Particle and Nuclear Physics, Quebec City, May 22-28, 2000.
- Session Chair, SESAPS Meeting, November 7-9, 1999, Chapel Hill NC.
- Contributor to Chapters 2 and 3 of the *Hall D Design Report*.
- Editor of NCSU/JLab workshop proceedings.
- Theory Organizer for CMU/JLab Workshop on Physics with 8+ GeV Photons
- Organizer of the NCSU/JLab Workshop on Photoproduction Physics
- Session chair at HADRON 97, Brookhaven National Laboratory

- journal referee for Phys. Rev. Lett., Phys. Rev. D, Ann. Phys., J. Phys. G, Phys. Rev. C, Nucl. Phys. A, Nucl. Phys. B, Phys. Lett. B, Eur. Phys. J. A, Few Body Systems, New Jour. Physics, Ad. HEP, Can. Jour. Physics, National Science Foundation, Department of Energy, DOE-OJI program, Research Corporation, Austrian Science Fund, US Civilian Research and Development Foundation, DOE Early Career, Physics Today.
- text proposal reviewer for Cambridge University Press (Scharoch), 2022.
- text proposal reviewer for World Scientific (Mitchell), 2018.
- text proposal reviewer for CRC Press, (T-Z Toh), 2018.
- text proposal reviewer for Brooks Cole (Zimmerman).
- text proposal reviewer for Oxford University Press.
- text proposal reviewer for CRC Press (Kelly).

Service – International

- Convener, Hadron 2023, Genoa, Italy, 2023.
- Nominator, Nobel Prize, Royal Swedish Academy of Sciences, 2023.
- Reviewer for the Royal Irish Academy, 2022.
- DFG proposal reviewer, 2022.

• Reviewer for promotion to University Research Professor, Memorial University of Newfoundland, 2018.
• Reviewer for Full Professor promotion, COMSATS Institute of Information Technology, 2018.
• Organizer, INT Workshop on Modern Exotics, Seattle, Nov 2-13, 2015.
• Member of the International Advisory Committee for Hadron 2013, Nara, Japan.
• Reviewer for the Natural Sciences and Engineering Research Council (Canada).
• International Advisory Committee, "Manifestations of Nonperturbative QCD Workshop", Caraguatatuba, Brazil, May, 2012.
• editorial board member for the B Factories Physics handbook.
• member PANDA (GSI) Theory Advisory Group, 2009 – 2015.
• guest co-editor, Journal of Physics G special issue on hadronic physics.
• Advisory Committee member, Hirschegg 2007.
• member, International Advisory Committee, Nstar 2006, Tallahassee.
• session organizer, Hadron 05, Rio de Janeiro.
• co-organizer, ECT* Workshop on Highly Excited Hadrons, July, 2005, Trento, Italy.
• session chair, Hadron 2003, Aschaffenburg, August, 2003.
• member, International Advisory Committee, Nstar 2004, Grenoble.
• co-editor, Proceedings of Nstar 2002.
• member, GSI Upgrade subcommittee on glueballs and hybrids, 2002 – present.
• co-organizer, German-American Graduate student exchange program (GRASP), 2001–2002.
• co-organizer, ECT* Workshop on Confinement and Nonperturbative QCD, March, 2003, Trento, Italy.

Teaching

Academic Year	Fall	Spring	Summer
26/27	–	Phys 0087 & Phys 1341	–
25/26	Phys 3765	Phys 3766	–
24/25	Phys 3274	Phys 0087	–
23/24	Phys 3274	(sabbatical)	–
22/23	Phys 3274	Phys 0087	–
21/22	Phys 3274	Phys 0087	–
20/21	–	Phys 0087	–
19/20	Phys 3274/FMFL	Phys 0087	–
18/19	Phys 3274	Phys 0087	–
17/18	Phys 3274	Phys 0087	–
16/17	(sabbatical)	Phys 0087	–
15/16	Phys 3725	Phys 3726 & Phys 0087	–
14/15	Phys 3707	Phys 0087	–
13/14	Phys 3707	Phys 0087	–
12/13	Phys 3765	Phys 3766	–
11/12	Phys 3765	Phys 3766	–
10/11	Phys 2274 & Phys 2999	Phys 2999	–
09/10	Phys 2274	–	–
08/09	Phys 3765	Phys 3766	–
07/08	Phys 3765	Phys 3766	–
06/07	Phys 175 & Phys 1311	Phys 1311	–
05/06	Phys 175 & Phys 1311	Phys 1311	–
04/05	Phys 111	(sabbatical)	
03/04	–	Phys 175	–
02/03	Phys 3707	–	–
01/02	Phys 3725	Phys 3726	–
00/01	Phys 104	–	–
99/00	PY781	PY782	–
98/99	PY781	PY782	–
97/98	PY205	PY611	–
96/97	–	PY611	PY208
95/96	–	PY341	PY205
94/95	N/A	PY205	PY205

Phys 3274: Computational Physics (Boudreau & Swanson; class notes; Numerical Recipes)
Phys 2274: Computational Physics (class notes; Numerical Recipes; Landau, Paez, and Bordeianu).
Phys 3766: Advanced Quantum Field Theory (Peskin & Schroeder; Donoghue, Golowich, & Holstein; Ramond; Itzykson & Zuber; Weinberg; class notes).
Phys 3765: Introductory Quantum Field Theory (Mandl & Shaw; Peskin & Schroeder; class notes).
Phys 3707: Intermediate Quantum Mechanics: Many-Body Physics (Fetter & Walecka; Mattuck; Negele and Orland, Schrieffer, class notes).
Phys 3726: Introduction to General Relativity II (Weinberg; Straumann; Kolb & Turner; Liddle & Lyth; class notes).
Phys 3725: Introduction to General Relativity (Wald, class notes).
Phys 104/PY205: Introductory Physics (Halliday, Resnick, and Walker, vol. 1).
Phys 111: Introductory Physics, Algebra Based (Cutnell and Johnson).
PY208/Phys 175: Introductory Physics (Halliday, Resnick, and Walker, vol 2; Young and Freedman, vol 2).
Phys 1341: Thermodynamics and Statistical Mechanics
Phys 1311: Undergraduate Seminar
PY341: Special and General Relativity (Rindler; class notes).

PY611: Introductory Quantum Field Theory (Gross; Mandl and Shaw).
PY781/782: Advanced Quantum Mechanics (Shankar; class notes).
Phys 0087: Science and Society (Swanson; class notes).

Presentations – Schools

32	QCD Phenomenology – exotics	Bochum	Jul	2024
31	QCD Phenomenology – models	Bochum	Jul	2024
30	QCD Phenomenology – introduction	Bochum	Jul	2024
29	Fake Science	REYES	Aug	2023
28	The Particle Explosion	REYES	Jun	2023
27	Exotic Hadrons	Uni Graz	Jun	2023
26	QCD, an introduction	Uni Graz	Jun	2023
25	Charmonia and XYZ	Belle II [BNL]	Jul	2019
24	QCD Exotics III	GGI School [Florence]	Feb	2017
23	QCD Exotics II	GGI School [Florence]	Feb	2017
22	QCD Exotics I	GGI School [Florence]	Feb	2017
21	QCD – Methods II	GGI School [Florence]	Feb	2017
20	QCD – Methods I	GGI School [Florence]	Feb	2017
19	Introduction to QCD II	GGI School [Florence]	Feb	2017
18	Introduction to QCD II	GGI School [Florence]	Feb	2017
17	Introduction to QCD I	GGI School [Florence]	Feb	2017
16	Nonperturbative QCD III	ICPF [Lahore]	Mar	2013
15	Nonperturbative QCD II	ICPF [Lahore]	Mar	2013
14	Nonperturbative QCD I	ICPF [Lahore]	Mar	2013
13	QCD VI	25th HUGS School [JLab]	Jun	2010
12	QCD V	25th HUGS School [JLab]	Jun	2010
11	QCD IV	25th HUGS School [JLab]	Jun	2010
10	QCD III	25th HUGS School [JLab]	Jun	2010
9	QCD II	25th HUGS School [JLab]	Jun	2010
8	QCD I	25th HUGS School [JLab]	Jun	2010
7	Nonperturbative QCD: phenomenology	XI Hadron Physics Sc [Sao Paulo]	Mar	2010
6	Nonperturbative QCD: theory II	XI Hadron Physics Sh [Sao Paulo]	Mar	2010
5	Nonperturbative QCD: theory I	XI Hadron Physics Sh [Sao Paulo]	Mar	2010
4	QCD and Hadronic Structure: Applications	NNPSS [Knoxville]	Jun	2003
3	QCD and Hadronic Structure: Models	NNPSS [Knoxville]	Jun	2003
2	QCD and Hadronic Structure: QCD	NNPSS [Knoxville]	Jun	2003
1	An Introduction to QCD in Coulomb Gauge	DAAD Summer School [Dubna]	Aug	2001

Presentations – Invited, Plenary, and Summary Conference Talks

84	Heavy Exotic States at the EIC	CFNS [Stony Brook]	Apr 2025
83	Modeling with Hamiltonian QCD	HHIQCD [Kyoto]	Oct 2024
82	Three body Unitarity and Charmonium	Coupled Channel Analysis [BESIII]	Aug 2024
81	Interpreting the X	LHCb/Theory Workshop [CERN]	Jun 2024
80	Heavy Quark Exotics	BEACH [Charleston]	Jun 2024
79	Properties and Signatures of Light Hybrids	ATHOS [W&M]	May2024
78	ExoHad Status	DOE TC Meeting	May2024
77	The Particle Explosion	CHP Meeting	Nov 2023
76	What do Exotic Hadrons Require of Theory?	APS April Mtg	Apr 2020
75	Conference Summary Talk	MENU 2019 [CMU]	May2019
74	Hybrid Mesons and their Decays	Simons Center [Stony Brook]	May2018
73	Pentaquarks and Hadronic Interactions	Bound States [Florence]	Mar 2018
72	Heavy Exotic Mesons	DNP [Pittsburgh]	Oct 2017
71	Overview of XYZ Theory	Lepton Beams Workshop [JLab]	Sept2017
70	XYZ States	B2TiP Workshop [Pittsburgh]	May2016
69	Cusps et al.	INT Workshop [Seattle]	Nov 2015
68	XYZ States: Theory Overview	Hadron 2015 [Newport News]	Sep 2015
67	Exotic Heavy Mesons	VIth GHP Workshop [Baltimore]	Apr 2015
66	Z States and Cusps	Bound States in QCD [St. Goar]	Mar 2015
65	Cusps, Resonances, and Exotic Charmonia	HHIQCD [Kyoto]	Feb 2015
64	Hadronic Transitions Round Table	QWG Meeting [CERN]	Nov 2014
63	Threshold States and Exotics	QWG Meeting [CERN]	Nov 2014
62	Progress and Issues in Hadronic Theory	Hadron 2013 [Nara]	Nov 2013
61	The New Hadrons (invited)	APS April Meeting [Denver]	Apr 2013
60	QCD Beyond the Standard Model	KITPC program [Beijing]	Jul 2012
59	QCD Exotics at PANDA	PANDA Collab [Evanston]	Jun 2012
58	Glueballs in the Bethe-Salpeter Formalism	QCD Workshop [Caraguatatuba]	May2012
57	QCD Exotics, old and new	35 Nucl Phys Sym [Cocoyoc]	Jan 2012
56	Heavy Flavour Spectroscopy	XXIII Rencontres de Blois	May2011
55	QED3 at Zero and Finite Temperature	SQFT [Morelia]	Apr 2011
54	Hadron Decay Dynamics	Structure of Hadrons [Hirschegg]	Jan 2011
53	Models of Exotic Mesons	EBAC Workshop [JLab]	May2010
52	Conference Summary Talk	Hadron 09 [Tallahassee]	Nov 2009
51	Unquenching, Requenching, and Renormalising the Quark Model	Charmed Exotics [Bad Honnef]	Aug 2009
50	Hadron Spectroscopy – Theory	DPF Meeting [Detroit]	Jul 2009
49	Theoretical Challenges in Spectroscopy (inv)	APS April Meeting [Denver]	May2009
48	Charmonium Opportunities	GHP2009 [Denver]	Apr 2009
47	X,Y,Z Mini Review	Moriond [La Thuile]	Mar 2009
46	Exotic Charm and Bottom States	PANIC 08 [Eilat]	Nov 2008
45	Heavy Quarkonia Theory Overview	Compass-JLab-GSI Mtg [Garching]	Oct 2008
44	Heavy Quarkonia – Theory	E-N Scattering X [Elba]	Jun 2008
43	The New Charmonia (invited)	APS April Meeting [St. Louis]	Apr 2008
42	Charmonium Production	Charm07 [Cornell]	Aug 2007
41	Flux Tubes	Hall A Collab [JLab]	Jun 2007
40	Open Issues in Meson Spectroscopy	JLab UGM	Jun 2007
39	A Canonical D_s Spectrum	Structure of Hadrons [Hirschegg]	Jan 2007
38	Spectroscopy Theory Overview	QCD Future [DC]	Dec 2006
37	A Canonical D_s Spectrum	Conf VII [Azores]	Aug 2006
36	Interpreting the New Heavy Mesons	QWG06 [BNL]	Jun 2006

35	The New Heavy Mesons	QNP06 [Madrid]	Jun 2006
34	The New Heavy Mesons	CIPANP [Puerto Rico]	Jun 2006
33	Review of Heavy Hadron Spectroscopy	Hadron 05 [Rio de Janeiro]	Aug 2005
32	Unquenching the Quark Model	ECT* Workshop [Trento]	Jul 2005
31	Chiral Restoration and the Failure of the CQM	ECT* Workshop [Trento]	Jul 2005
30	The New Heavy Hadrons	QCD05 [Beijing]	Jun 2005
29	Hadron-hadron Interactions	PN12 Meeting [JLab]	Nov 2004
28	Beyond the CQM: X(3872) and Charm Decays	BaBar Workshop [SLAC]	May2004
27	Strong Decays of Charmonia	Panda Workshop [Frascati]	Mar 2004
26	Aspects of Confinement	Hadron 2003 [Aschaffenburg]	Aug 2003
25	How Reliable is the Quark Model?	Dynamic Approaches to Meson Photoproduction Workshop [Ohio U]	Jun 2003
24	Hybrid Mesons in the Flux Tube Model	JLab-INT Workshop	May2003
23	The Phenomenology of Coulomb Gauge QCD	Conf. Workshop [Trento]	Mar 2003
22	Hadronic Structure from QCD	Int. Symp. on Hadrons [Tokyo]	Feb 2003
21	The Short Range Structure of QCD	N* 2002 [Pittsburgh]	Oct 2002
20	GRASP in America	DFG [Bonn]	Apr 2002
19	Nathan, Ed, and the QCD Vacuum	Isgur Memorial Symp [Toronto]	Apr 2002
18	Status of the Constituent Quark Model	Hadron 2001 [Protvino]	Aug 2001
17	$c\bar{c}$ Spectroscopy and $c\bar{c}g$ Hybrids at CLEO-c	CLEO-c Workshop [Cornell]	May2001
16	Open Issues in Hadronic Physics	Argonne Theory Institute	Aug 2000
15	Hall D Theory Status	JLab Review Committee	Dec 1999
14	Hall D Science Goals	Hall D Design Report Mtg	Aug 1999
13	Science Goals of Hall D	RPI/JLab Workshop	Mar 1999
12	QCD in Coulomb Gauge	Aspen Winter Conf.	Jan 1999
11	QCD Exotica: Theory Status	DNP Fall Meeting [Santa Fe]	Oct 1998
10	Theory Summary Talk	JLab UGM	Jun 1998
9	Searching for Soft Glue: Hybrids and Glueballs	JLab UGM	Jun 1998
8	Theory Summary Talk	CMU/JLab Workshop	Mar 1998
7	Final State Interactions	CMU/JLab Workshop	Mar 1998
6	QCD Exotica: Theory Perspectives	Hadron 1997 [BNL]	Aug 1997
5	Hybrid Phenomenology	IUJL Workshop	Jul 1997
4	Hybrids and Quark Confinement	QCD97 [Montpellier]	Jul 1997
3	Hybrids and Quark Confinement	Perspectives [ICTP]	May1997
2	The YN Interaction in the Quark Model	INT/CEBAF Workshop	Oct 1995
1	A New Model of Hadrons	Gluonium'95 [Propriano]	Jun 1995

Presentations – Public Lectures

15	Less Wrong, What is Real?	UC Davis	Mar 2026
14	Less Wrong, What is Real?	UC Berkeley	Mar 2026
13	Pseudoscience and Science, Science Revealed	Pitt	Apr 2025
12	Cell Phones and Cancer	Univ. Punjab	Mar 2013
11	Cell Phones, Body Scanners, and Cancer	IUB	Oct 2012
10	Constructing Quarks	Shanghai Jiao Tong	Jul 2012
9	The X,Y,Zs of Heavy Flavour	Shanghai Jiao Tong	Jul 2012
8	Constructing Quarks	Inst. Fisica de Sao Carlos	May 2012
7	Pseudoscience	Inst. Fisica de Sao Carlos	May 2012
6	Pseudoscience	Unitarian Church Forum	Jan 2012
5	Pseudoscience	Pitt Secular Alliance	Oct 2011
4	Cell Phones and Cancer	Pittsburgh Science Center	Sep 2011
3	Cell Phones, Body Scanners, and Cancer	Moon Township Library	May 2011
2	Cell Phones, Body Scanners, and Cancer (colloq)	Old Dominion U	Mar 2011
1	Cell Phones, Body Scanners, and Cancer	Cafe Scientifique [Pgh]	Mar 2011

Presentations – Colloquia, Seminars, and Talks

175	Predictiveness as Discovery	STAMPS [CMU]	Sep 2026
174	Discovering Hybrid Mesons	IHEP [Beijing]	Jun 2026
173	Predictiveness as Discovery	Exotics [Cambridge]	Mar 2026
172	Predictiveness as Discovery	UC Davis	Mar 2026
171	Coupled Channel Analysis of Bottom and Charm	LBNL	Mar 2026
170	Bayesian Predictiveness as Discovery	PittPACC [Pitt]	Jan 2026
169	Examining the K-matrix Formalism	ExoHad 2025 [LLNL]	Jul 2025
168	Analyticity in the K-matrix Formalism	QCD2025 [Montpellier]	Jun 2025
167	Pseudoscience and Science	Science Revealed [Pitt]	Apr 2025
166	Modelling with Hamiltonian QCD	Kent State	Oct 2024
165	Pseudoscience Beliefs Among Undergraduate Students	dB SERC [Pitt]	Jul 2024
164	Modelling Glue	SNP [Cocoyoc]	Jan 2024
163	Modelling Multiquarks	ExoHad Collab	Oct 2023
162	Reducing Belief in Pseudoscience I	dB-SERC[Pitt]	Oct 2023
161	The LHC State P-psi-s as a Triangle Singularity	Hadron23 [Genoa]	Jun 2023
160	K-matrix Analysis of Bottomonium in e^+e^-	Hadron23 [Genoa]	Jun 2023
159	Can Constituent Gluons Describe Glueballs and Hybrids?	Hadron23 [Genoa]	Jun 2023
158	Phenomenology at ExoHad	MIAPP [Munich]	May 2023
157	Can Constituent Gluons Describe Glueballs and Hybrids?	MIAPP [Munich]	May 2023
156	Origins of the GHP	GHP-23 [MN]	Apr 2023
155	The LHC State P-psi-s as a Triangle Singularity	GHP-23 [MN]	Apr 2023
154	K-matrix Analysis of Bottomonium in e^+e^-	GHP-23 [MN]	Apr 2023
153	Can Constituent Gluons Describe Glueballs and Hybrids?	INT [WA]	Mar 2023
152	Consistent Interpretation of the Pentaquarks in Λ_b Decay	FDSA [JLab]	Nov 2022
151	K-matrix Analysis of Bottomonium in e^+e^-	CIPANP [Orlando]	Aug 2022
150	Consistent Interpretation of the Pentaquarks in Λ_b Decay	CIPANP [Orlando]	Aug 2022
149	Pseudoscientific Beliefs Among Undergraduate Students	AAPT [Grand Rapids]	Jul 2022
148	Interpreting the Pentaquark States	Hadron2021	Jul 2021
147	Science Communication in the Trenches	SciPEP	Jul 2021
146	Multiquark Phenomenology	GHP-21	Apr 2021
145	Experimental Tests and Interpretations of the X(2900)	QCD-20	Oct 2020
144	Charmonia and Charmonia Hybrids	Snowmass-21	Sep 2020
143	Hybrids and Pentaquarks	JLab	May 2020
142	Heavy Exotic Conundrums	U. Genoa	Jun 2017
141	Beasts of the Subatomic Wild (colloq)	Iowa St	Jan 2017
140	Exotic Spectroscopy	MIAPP, TUM	Nov 2016
139	Heavy Exotic Conundrums	GSI	Oct 2016
138	New Exotic Hadrons (colloq)	BNL	Dec 2015
137	Exotic Heavy Mesons	U. Indiana	Apr 2015
136	Beasts of the Subatomic Wild (colloq)	U. Pittsburgh	Nov 2014
135	Progress and Issues in Hadronic Phenomenology	J Lab	Aug 2014
134	Progress and Issues in Hadrons	Univ. FL	Mar 2014
133	Cell Phones and Cancer (colloq)	Univ. FL	Mar 2014
132	The New States	Univ. Ky	Dec 2013
131	Cell Phones and Cancer (public lecture)	Univ. Punjab	Mar 2013
130	The New Hadrons	Univ. Punjab	Mar 2013
129	Cell Phones, Body Scanners, and Cancer (colloq)	Uni Graz	Feb 2013
128	Glueballs in the Bethe-Salpeter Formalism	Uni Graz	Feb 2013
127	The New Exotic Mesons	Uni Graz	Feb 2013
126	Glueballs in the Bethe-Salpeter Formalism	eQCD [Sarajevo]	Feb 2013
125	Cell Phones, Body Scanners, and Cancer (colloq)	IUB	Oct 2012

124	Constructing Quarks	Shanghai Jiao Tong	Jul 2012
123	The X,Y,Zs of Heavy Flavour	Shanghai Jiao Tong	Jul 2012
122	Constructing Quarks	Inst. Fisica de Sao Carlos	May 2012
121	Pseudoscience (colloq)	Inst. Fisica de Sao Carlos	May 2012
120	Pseudoscience	Unitarian Church Forum	Jan 2012
119	Pseudoscience	Pitt Secular Alliance	Oct 2011
118	From Lagrangian to Hadron	33rd Nuclear Phys. [Erice]	Sep 2011
117	Cell Phones and Cancer	Pittsburgh Science Center	Sep 2011
116	Cell Phones, Body Scanners, and Cancer	Moon Township Library	May 2011
115	Cell Phones, Body Scanners, and Cancer (colloq)	Old Dominion U	Mar 2011
114	Cell Phones, Body Scanners, and Cancer	Cafe Scientifique [Pgh]	Mar 2011
113	Confinement at Finite Temperature	Ex. QCD [Les Houches]	Feb 2011
112	Confinement at Finite Temperature	49th N.P. Mtg. [Bormio]	Jan 2011
111	Cell Phones, Body Scanners, and Cancer (colloq)	U. Pittsburgh	Jan 2011
110	Confinement at Finite Temperature	Kent State	Dec 2010
109	Confinement at Finite Temperature	Argonne	Oct 2010
108	QCD Beyond the Standard Model	Excited QCD [Lomnica]	Feb 2010
107	Confinement Models at Finite Temperature	Excited QCD [Lomnica]	Jan 2010
106	GHP and Spectroscopy at PANDA	GSI (remote)	Dec 2009
105	Phenomenology at the End of the Alphabet	UC Davis	Apr 2009
104	Unquenching and Requenching the CQM	Excited QCD [Zakopane]	Feb 2009
103	QCD and Its Exotic Particles	Bochum Univ	Jan 2009
102	QCD and Its Exotic Particles (colloq)	Birzeit Univ	Nov 2008
101	The New Mesons	Ohio University	Oct 2008
100	QED3	U Pittsburgh	Sep 2008
99	The New Charmonia	Argonne	Feb 2008
98	The X,Y,Zs of Charmonium	UIUC	Jan 2007
97	A Canonical D_s Spectrum	GHP06 [Nashville]	Oct 2006
96	Constructing Quarks (public lecture)	Allegheny Observatory	Mar 2006
95	The New Heavy Mesons	J Lab	Mar 2006
94	NN Interactions (and the EOS) from the Quark Model	TSI Collab [Chapel Hill]	Jan 2006
93	The New Heavy Hadrons	U Indiana	Oct 2005
92	Strong QCD: Explorations and Applications (colloq)	U Pittsburgh	Sep 2005
91	The Search for QCD Exotics	Izmir IT	Jul 2005
90	Model Building with QCD in Coulomb Gauge	U Surrey	Jul 2005
89	The New Heavy Hadrons	U Glasgow	Jun 2005
88	The New Heavy Hadrons	U Cambridge	May 2005
87	The New Heavy Hadrons	U Liverpool	May 2005
86	Model Building with QCD in Coulomb Gauge	U Durham	Apr 2005
85	Confinement and Phenom. of QCD in Coulomb Gauge	U Oxford	Feb 2005
84	The New Heavy Hadrons	U Oxford	Jan 2005
83	QCD and its Exotic Particles	U Pittsburgh	Oct 2004
82	$\bar{D}D^*$ and $\bar{D}^*D^*$ Molecules	GHP04 [FNAL]	Oct 2004
81	The New Heavy Hadrons	WSU	Oct 2004
80	QCD and its Exotic Particles (colloq)	WSU	Oct 2004
79	The New Heavy Hadrons	CMU	Sep 2004
78	Properties of the $X(3872)$ and $D^*\bar{D}^*$ Molecules	ICHEP [Beijing]	Aug 2004
77	Coulomb Gauge QCD and Confinement	McGill	Jun 2004
76	Parity Doubling in the Meson Spectrum	CMU	Oct 2003
75	Hadronic Physics and Coulomb Gauge QCD	TITech, Tokyo	Feb 2003
74	Confinement and Exotic Particles (colloq)	U Pittsburgh	Sep 2002
73	Constructing Confinement	U Liege	Jun 2002
72	Constructing Confinement	U Leiden	Jun 2002
71	Constructing Confinement	U Tübingen	Apr 2002
70	Constructing Confinement	U Bonn	Apr 2002

69	Constructing Confinement	Los Alamos	Mar 2002
68	Confinement and the Quark Model	Lake Louise Winter Inst	Feb 2002
67	Deriving Confinement and the Quark Model	U Kentucky	Dec 2001
66	Quarks and Gluons	U Pittsburgh	Nov 2001
65	Why Hadronic Interactions Matter	CMU	Oct 2001
64	Deriving Confinement and the Quark Model	Kent State	Oct 2001
63	Chiral Symmetry and the Quark Model	Hadron 2001 [Protvino]	Aug 2001
62	QCD in Coulomb Gauge	TRIUMF	Aug 2001
61	QCD in Coulomb Gauge	University of Washington	Aug 2001
60	Exotic Mesons: Theory Perspectives	JLab/UGM	Jun 2001
59	Searching for Exotics at CLEO	Cornell	Feb 2001
58	Hadron-Hadron Scattering: from $\pi\pi$ to $\pi\psi$	Hirschegg/01	Jan 2001
57	Quarks and Gluons	U Pittsburgh	Oct 2000
56	On the Viability of the Quark Model	CMU	Oct 2000
55	Aspects of QCD in Coulomb Gauge	Uni-Bonn	Jul 2000
54	Aspects of QCD in Coulomb Gauge	IKP Jülich	Jul 2000
53	Searching for Exotic Mesons (colloq)	NCSU	Aug 1999
52	Heavy Hybrids with Constituent Gluons	QCD99 [Montpellier]	Jul 1999
51	QCD in Coulomb Gauge	U Pittsburgh	May 1999
50	The Search for Exotic Mesons (colloq)	New Mexico State	Mar 1999
49	QCD in Coulomb Gauge	Los Alamos (T5)	Mar 1999
48	The Search for Exotic Mesons (P/T colloq)	Los Alamos	Mar 1999
47	QCD in Coulomb Gauge	Argonne	Sep 1998
46	Soft Glue and the Dirac Structure of Confinement	Conf III [Williamsburg]	Jun 1998
45	QCD in Coulomb Gauge	Ohio State	Mar 1998
44	QCD in Coulomb Gauge	Indiana-Bloomington	Mar 1998
43	Are Hybrids Found?	SLAC	Dec 1997
42	Are Hybrids Found? (colloq)	Lawrence Berkeley Lab	Dec 1997
41	Constructing the Universe: the Particle Explosion	NCSU	Jul 1997
40	The Dirac Structure of Confinement	Univ. of Maryland	Nov 1996
39	QCD and the Dynamical Quark Model	DNP [Cambridge, MA]	Oct 1996
38	QCD and the Dynamical Quark Model	Rutherford Appleton Lab	Sep 1996
37	QCD and Hadronic Physics	LEAP 96 [Dinkelsbühl]	Aug 1996
36	QCD and the Dynamical Quark Model	TRIUMF	Aug 1996
35	The Dynamical Quark Model: Applications	FSU	Jun 1996
34	The Dynamical Quark Model: Theory	FSU	Jun 1996
33	Microscopic Models of Strong Decays	Panic '96 [Williamsburg]	May 1996
32	Pseudoscience: What it is and Why its Dangerous	AAPT [NCSU]	Mar 1996
31	Glueball spectroscopy: A relativistic many-body approach to hadronic structure	ORNL	Dec 1995
30	A New Model of Hadrons	Hadron '95 [Manchester]	Jul 1995
29	Hybrid and Conventional Mesons in the Flux Tube Model	Hadron'95 [Manchester]	Jul 1995
28	From Maxwell to Gell-Mann: a Century of Field Theory	NCSU	Mar 1995
27	Chiral Pions and the Naive Quark Model	CEBAF	Mar 1995
26	Isgur-Wise Symmetry in QCD_{1+1}	UNC-Chapel Hill	Feb 1995
25	Distinguishing Among Strong Decay Models	Duke University	May 1994
24	Isgur-Wise Symmetry in QCD_{1+1}	University of Toronto	Aug 1993
23	Constituent Quark Model of $\gamma\gamma \to \pi\pi$ and VV	Hadron'93 [Como]	Jun 1993
22	Isgur-Wise Symmetry in QCD_{1+1}	Rutherford Appleton Lab	Jun 1993
21	One quark, two quark, red quark, blue quark (colloq)	NCSU	Mar 1993
20	Hadronic Interactions in the Constituent Quark Model	NCSU	Mar 1993
19	Hadronic Interactions and $\gamma\gamma \to \pi\pi$	TRIUMF	Feb 1993
18	Isgur-Wise Symmetry in QCD_{1+1}	Yale University	Oct 1993
17	KN and $K\pi$ Scattering	MIT	Oct 1993

16	Hadronic Interactions in the Constituent Quark Model	ORNL	Mar 1992
15	Isgur-Wise Symmetry in QCD_{1+1}		
	ITP Topical Workshop on Heavy Quarks, Santa Barbara		Feb 1992
14	Hadronic Interactions in the Constituent Quark Model	CEBAF	Feb 1992
13	Hadronic Interactions and Their Epiphenomena	MIT/BATES	Nov 1991
12	Hadronic Interactions in the Constituent Quark Model	Los Alamos	Apr 1991
11	Hadronic Interactions in the Constituent Quark Model	University of Maryland	Mar 1991
10	Hadronic Interactions in the Constituent Quark Model	MIT	Mar 1991
9	Hadronic Interactions in the Constituent Quark Model	University of Washington	Feb 1991
8	Hadronic Interactions in the Constituent Quark Model	TRIUMF	Feb 1991
7	Quantum Monte Carlo Simulation of the 2-d Heisenberg Model		
	CAP/NSERC High T_c Workshop [Kingston]		Jul 1990
6	Inter-meson Potentials	MRST12 [Montreal]	May 1990
5	Quantum Monte Carlo Simulation of the 2-d Heisenberg Model		
		University of Toronto	Oct 1989
4	Path Integrals in Curved Spacetime	University of Toronto	Oct 1988
3	Quantum Monte Carlo Simulation of the 2-d Heisenberg Model		
	NYU-Rutgers Quantum Monte Carlo Workshop, NYU		May 1987
2	Compact U(1) Hamiltonian Lattice Gauge Theory	University of Toronto	Jan 1987
1	The Linearized Quotient-Difference Algorithm	University of Waterloo	Jun 1984

Meetings

171. TaoFest, May 24-15, 2026, U. Pitt, Pittsburgh, PA.

170. Workshop on Trustworthy Statisical Inference for the Physical Sciences, May 13-15, 2026, CMU, Pittsburgh, PA.

169. Exotic Hadron Spectroscopy, Mar 30 -Apr 1, 2026, Cambridge, UK.

168. ExoHad Collaboration Meeting, July 21-22, 2025, LBNL.

167. 28th High Energy Physics International Conference, June 30 - July 4, 2025, Montpellier France.

166. AI for Hadron Spectroscopy at JLab, June 4-5, 2025, JLab.

165. Workshop on Nonperturbative Quantum Field Theory and Confinement, May29-31, 2024, CMU.

164. Exotic Heavy Meson Spectroscopy and Structure with EIC, Apr 14-17, 2025, Stony Brook.

163. Workshop on Coupled Channel Analysis of Charmonia, Mar 23-24, 2025, Beijing

162. Hadrons and Hadron Interactions, Oct 14 - Nov 15, 2024, Kyoto, Japan.

161. BESIII Workshop on coupled channel analyses of charmonia, Aug 19-23, 2024, Mainz, Germany.

160. Modern Techniques in Hadron Spectroscopy, 15-27 July, 2024, Bochum, Germany.

159. LHCb Meets Theory Workshop, June 27, 2024, CERN.

158. BEACH, XV International Conference on Beauty, Charm, Hyperons in Hadronic Interactions, June 3-7, 2024, Charleston SC.

157. PWA13/ATHOS8, May 28 - June 1, 2024, Williamsburg, VA.

156. 45th Symposium on Nuclear Physics, Jan 8-11, 2024, Cocoyoc, Mexico.

155. First Meeting of the ExoHad Topical Collaboration, Oct 25, 2023.

154. 20th International Conference on Hadron Spectroscopy, June 5-9, 2023, Genoa, Italy,

153. “The present and future of heavy flavour and exotic hadron spectroscopy", MiAPP, May 8-June 2, 2023, Munich, Germany.

152. 10’th Workshop of the APS Topical Group on Hadronic Physics, April 12-14, 2023, Minneapolis, MN.

151. “Accessing and Understanding the QCD Spectra", March 20-24, 2023, INT, Seattle, WA.

150. 4th Workshop on Future Directions in Spectroscopy Analysis, Nov 14-16, 2022, JLab, VA.

149. Conference on the Intersections of Particle and Nuclear Physics, Aug 29-Sept 4, 2022, Lake Buena Vista, FL.

148. AAPT Summer Meeting, July 9-13, 2022, Grand Rapids, MI.

147. Double Charm Tetraquark and other Exotics, Nov 22-23, 2021, Lyon, France.

146. Hadron 2021, July 26-31, 2021, Mexico City, Mexico.

145. SciPEP, Communicating the Future: Engaging the Public in Basic Science, July 27-28, 2021.

144. 9th Workshop of the APS Topical Group on Hadronic Physics, Apr 13-16, 2021, Sacramento CA.

143. 23rd High Energy Physics International Conference in QCD, Oct 27-30, 2020, Montpellier, France.

142. Snowmass RF7 meeting, Sept 23, 2020.

141. Accessing and Understanding the QCD Spectra, Aug 17 - Sept 18, 2020, INT, Seattle, WA.

140. APS April Meeting, Apr 18 - 21, 2020, Washington DC.

139. Belle II Summer School, July 29 - Aug 2, 2019, BNL, NY.

138. 15th International Conference on Meson-Nucleon Physics and the Structure of the Nucleon, June 3-7, 2019, CMU, Pittsburgh.

137. Workshop on Exotic Hadrons and Flavor Physics, May 28-June 1, 2018, Simons Center for Geometry and Physics, Stony Brook, Long Island.

136. Bound States in Strongly Coupled Systems, Mar 12-16, 2018, Galileo Galilei Institute for Theoretical Physics, Florence, Italy.

135. Fall Meeting of the APS Division of Nuclear Physics, Oct 25-28, 2017, Pittsburgh PA.

134. Hadron Physics with Lepton and Hadron Beams, Sept 5-9, 2017, Jefferson Lab, VA.

133. Galileo Galilei Institute for Theoretical Physics, Frontiers in Nuclear and Hadronic Physics, Feb 20-Mar 3, 2017, Florence, Italy.

132. Flavour Physics Programme, Oct 24 - Nov 18, 2016, MIAPP, Garching, Germany.

131. B2TiP Workshop, May 23-25, 2016, Pittsburgh, PA.

130. Modern Exotic Hadrons, Nov 2-13, 2015, Seattle, WA.

129. Hadron 2015, Sep 14-18, 2015, Newport News, VA.

128. PWA 8/ ATHOS 3 Workshop, Apr 13-17, 2015, Ashburn VA.

127. Sixth Workshop of the APS Topical Group on Hadronic Physics, Apr 8-10, 2015, Baltimore, MD.

126. Bound States in QCD Workshop, Mar 24-27, 2015, St. Goar, Germany.

125. Hadrons and Hadronic Interactions in QCD, Feb 15-22, 2015, Yukawa Institute, Kyoto, Japan.

124. Quarkonium Working Group Meeting, Nov 10-14, 2014, CERN, Switzerland.

123. Hadron 2013, Nov 4-8, 2013, Nara, Japan.

122. Phenomenology 2013, May 6-8, 2013, Pittsburgh PA.

121. APS April Meeting, Apr 13-16, 2013, Denver, CO.

120. Fifth Workshop of the APS Topical Group on Hadronic Physics, Apr 10-12, Denver, CO.

119. Fifth International Meeting on Particles and Fields, Mar 25-28, 2013, Lahore, Pakistan.

118. Excited QCD 2013, Feb 3-9, 2013, Sarajevo, Bosnia.

117. Kavli Institute of Theoretical Physics, China, “From Nucleon to Nuclear Structure", June 11 - July 20, 2012, Beijing, China.

116. PANDA Collaboration Meeting, June 25-19, 2012, Evanston, IL.

115. Many Manifestations of Nonperturbative QCD, Apr 30 - May 5, 2012, Caraguatatuba, Brazil.

114. Twin Approaches to Confinement Physics, Mar 12-15, 2012, Newport News, VA.

113. XXXVth Nuclear Physics Symposium, Jan 3-6, 2012, Cocoyoc, Mexico.

112. XXXIII Erice School of Nuclear Physics, Sept 16-24, 2011, Erice, Italy.

111. 23rd Rencontres de Blois, Particle Physics and Cosmology, May 29 - June 3, 2011, Blois, France.

110. 3rd Workshop on Nonperturbative Aspects of Field Theories, Apr 4-8, 2011, Morelia, Mexico.

109. Excited QCD, Feb 20-25, 2011, Les Houches, France.

108. 49th Winter Meeting on Nuclear and Particle Physics, Jan 24-28, 2011, Bormio, Italy.

107. 39th Meeting on the Structure and Dynamics of Hadrons, Jan 17-21, 2011, Hirschegg, Austria.

106. Pearson Physics Education Symposium, Nov 6-8, 2010, Las Vegas, NV.

105. 25th Annual Hampton University Graduate Studies Program, June 1-18, 2010, JLab, VA.

104. Extractions and interpretations of hadron resonances and multi-meson production reactions with the 12 GeV upgrade, May 27-28, 2010, EBAC, JLab, VA.

103. XI Hadron Physics School, Mar 21-26, 2010, Maresias Beach, São Paulo, Brazil.

102. Excited QCD - 2010, Jan 31 - Feb 5, 2010, Tatranska Lomnica, Slovakia.

101. PANDA Theory Advisory Group Meeting, December 7-8, 2009, Darmstadt, Germany (remote).

100. XIII International Conference on Hadron Spectroscopy, November 29 - December 4, 2009, Tallahassee, FL.

99. Charmed Exotics: the 447th Wilhelm and Else Heraeus Seminar, August 10-12, 2009, Bad Honnef, Germany.

98. DPF09, APS Division of Particle and Fields Meeting, July 26-31, 2009, Detroit, MI.

97. APS April Meeting, May 1-5, 2009, Denver, CO.

96. APS Topical Group on Hadronic Physics Meeting, April 28-30, 2009, Denver, CO.

95. QCD and High Energy Interactions (Rencontres de Moriond), March 14-21, 2009, La Thuile, Italy.

94. Excited QCD 09 Workshop, Feb 8 -14, 2009, Zakopane, Poland.

93. McGraw Hill Symposium, Jan 22- Feb 1, 2009, Napa Valley, CA.

92. International Conference on Particles and Nuclei (PANIC08), November 9-14, 2008, Eilat, Israel.

91. Physics and methods in meson spectroscopy - Int. Joint Workshop CERN COMPASS-Jefferson Lab-GSI FAIR, October 22-24, 2008, Garching, Germany.

90. Electron-Nucleus Scattering X, June 23-27, 2008, Marciana Marina, Elba, Italy.

89. APS April Meeting, Apr 12-15, 2008, St. Louis MO.

88. Charm 2007 Workshop, August 5-8, 2007, Ithaca NY.

87. Jefferson Lab User Group Meeting, June 18-20, 2007, Newport News VA.

86. Workshop on the Structure and Dynamics of Hadrons, Jan 14-20, 2007, Hirschegg, Austria.

85. Workshop on Future Opportunities in QCD, Dec 15-16, 2006, Washington, DC.

84. Second Meeting of the APS Topical Group on Hadronic Physics, Oct 22-24, 2006, Nashville, TN.

83. Quark Confinement and the Hadron Spectrum VII, Sept 2-7, 2006, Ponta Delgada, Azores.

82. International Workshop on Heavy Quarkonium, June 27-30, 2006, BNL.

81. Fourth International Conference on Quarks and Nuclear Physics, June 5-10, 2006, Madrid.

80. Conference on the Intersection of Particle and Nuclear Physics, May 30 - July 3, 2006, Puerto Rico.

79. Conference on Reductionism and Anti-Reductionism in Physics, Apr 22-23, 2006, Pittsburgh PA.

78. Terascale Supernova Initiative Collaboration Meeting, Jan 17-19, 2006, Chapel Hill, NC.

77. Hadron05: XI International Conference on Hadron Spectroscopy, Aug 21-26, 2005, Rio de Janeiro.

76. ECT Workshop on Resonances in QCD, July 11-16, 2005, Trento, Italy.

75. ECT Workshop on Excited Hadrons, July 4-9, 2005, Trento, Italy.

74. International Conference on QCD and Hadronic Physics, June 16-20, 2005, Beijing.

73. The Physics of Nuclei with 12 GeV Electrons Workshop, Nov 1-5, 2004, Jefferson Lab VA.

72. First Meeting of the APS Topical Group on Hadronic Physics, Oct 24-26, 2004, FNAL.

71. International Conference on High Energy Physics, Aug 16-22, 2004, Beijing.

70. BaBar Collaboration Workshop on Charmonium Spectroscopy, May 10-11, 2004, SLAC.

69. Second Panda Physics Workshop, Mar 18-19, 2004, Frascati, Italy.

68. Pentaquark 2003 Workshop, Nov 6-8, 2003, Jefferson Lab VA.

67. Tenth International Conference on Hadron Spectroscopy, Aug 31 - Sept 6, 2003, Aschaffenburg, Germany.

66. National Nuclear Physics Summer School, June 15-28, 2003, University of Tennesee, Knoxville, TN.

65. Workshop on Dynamic Approaches to Meson Photoproduction, June 1-3, 2003, Ohio University, Athens, Ohio.

64. JLab-INT Workshop on Gluonic Excitations, Jefferson Lab VA, May 14-16, 2003.

63. APS April Meeting, Philadelphia PA, April 5-8, 2003,

62. Workshop on Aspects of Confinement and Nonperturbative QCD, ECT, Trento, Italy, Mar 10-17, 2003.

61. International Symposium on Hadron Spectroscopy, Chiral Symmetry, and the Relativistic Description of Bound States, Nihon University, Tokyo, Feb 24-26, 2003.

60. Workshop on the Physics of Excited Nucleons, Pittsburgh PA, Oct 9-12, 2002.

59. Workshop on Partial Wave Analysis, Carnegie Mellon University, June 2-4, 2002.

58. Isgur Memorial Symposium, University of Toronto, Apr 6, 2002.

57. 2002 Lake Louise Winter Institute, “Fundamental Interactions", Lake Louise Alberta, Feb 17-23, 2002.

56. APS Unit Convocation, Washington, D.C., Feb 1-2, 2002.

55. Hall D Collaboration Meeting, Indiana University, Nov 1-3, 2001.

54. IX International Conference on Hadron Spectroscopy, Protvino, Russia, August 25 - September 1, 2001.

53. 9th International Symposium on Meson-Nucleon Physics and the Structure of the Nucleon, Washington DC, July 26-31, 2001.

52. DAAD Summer School: Dense Matter In Particle and Astrophysics, Dubna, Russia, August 20-31, 2001.

51. JLab Annual User Group Meeting and Workshop, Newport News, VA, June 20-22, 2001.

50. Workshop on Prospects for CLEO/CESR with $3 < E_{cm} < 5$ GeV, Ithaca NY, May 5-7, 2001.

49. Hall D Collaboration Meeting, Jefferson Lab, March 16-17, 2001.

48. The Structure of Hadrons, Hirschegg, Austria, Jan 14-20, 2001.

47. Nuclear Physics Town Meeting, Jefferson Lab, Dec 1-4, 2000.

46. Key Issues in Hadronic Physics, Sanderling, N.C., Nov 5-10, 2000.

45. Argonne Theory Institute, Argonne National Lab, August 14-18, 2000.

44. Seventh International Conference on the Intersections of Particle and Nuclear Physics, Quebec, May 22-28, 2000.

43. N*2000, Jefferson Lab, February 16-19, 2000.

42. MIT/JLab Lattice Collaboration Meeting, Jefferson Lab, January 13-15, 2000.

41. Southeast Section of the APS Meeting, Chapel Hill, NC, November 7-9, 1999.

40. Hall B N^* Analysis Workshop, Jefferson Lab, October 1-2, 1999.

39. Hall D Design Report Workshop, Jefferson Lab, August 5-6, 1999.

38. QCD in Nuclear Physics Gordon Research Conference, Salve Regina University, Newport, RI, July 25-30, 1999.

37. QCD Euroconference 99, Montpellier, France, July 7-13, 1999.

36. Workshop on a New Facility for High Energy Photoproduction, Rensselaer Polytechnic Institute, Troy, NY, Mar 11-13, 1999.

35. Aspen Winter Conference on Nonperturbative Particle Dynamics, Jan 10-16, 1999.

34. APS Division of Nuclear Physics Meeting, Santa Fe NM, Oct 28-31, 1998.

33. JLab Conference on Physics and Instrumentation with 6-12 GeV Beams, June 15-18, 1998.

32. Confinement III, Newport News, VA, June 7-12, 1998.

31. Workshop on Hadronic Physics in the 21st Century, Washington, DC, March, 1998.

30. CMU/JLab Workshop on Physics with 8+ GeV Photons, Pittsburgh, PA, March, 1998.

29. NCSU Miniworkshop on Light Cone Physics, Raleigh, NC, Jan, 1998.

28. NCSU/JLab Workshop on Hybrids and Photoproduction Physics, Raleigh, NC, Nov, 1997.

27. Seventh International Conference on Hadron Spectroscopy (Hadron97), Brookhaven National Laboratory, August, 1997.

26. IUJL Workshop on Physics with 8+ GeV Photon Beams, Bloomington, IN, July, 1997.

25. QCD Euroconference, Montpellier, France, July, 1997.

24. Conference on Perspectives in Hadronic Physics, ICTP, Trieste, Italy, May, 1997.

23. Fall Meeting of the DNP, Cambridge, MA, Oct., 1996.

22. Low Energy Antiproton Physics (LEAP '96), Dinkelsbühl, Germany, Aug., 1996.

21. Particles and Nuclei International Conference, Williamsburg, VA, May, 1996.

20. First Annual Meeting of the NC AAPT, Raleigh, NC, March, 1996.

19. CEBAF/INT Workshop on Hypernuclei and the YN Interaction, Oct., 1995.

18. Hadron 95, Manchester, England, July, 1995.

17. Gluonium 95, Propriano, Corsica, June, 1995.

16. Few Body XIV, Williamsburg, VA, May, 1994.

15. CEBAF at Higher Energy Workshop, Newport News, VA, April, 1994.

14. Hadron 93, Como, Italy, June, 1993.

13. Quark Cluster Dynamics, Bad Honnef, Germany, June, 1992.

12. BARYON'92, Yale University, CN, June, 1992.

11. Topical Conference on Heavy Quark Physics, ITP, Santa Barbara, CA, Jan., 1992.

10. CAP/NSERC Workshop on High Temperature Superconductivity, July, 1990.

9. PANIC XII, Boston, MA, June, 1990.

8. MRST XII, Montreal, PQ., May, 1990.

7. CAP/NSERC Workshop on High Energy Physics, Kingston, Ont., July, 1989.

6. MRST XI, Syracuse, NY, May, 1989.

5. Second Canadian Symposium on High Temperature Superconductivity, Vancouver, BC., Oct., 1988.

4. MRST X, Toronto, Ont., May, 1988.

3. NYU/Rutgers Workshop on Quantum Monte Carlo Methods, NYU, NY, May, 1987.

2. Cosenor's House Meeting, Abingdon, UK, May, 1987.

1. Rutherford Winter Meeting, Rutherford Appleton Laboratory, UK, Dec. 1986.