

## **CURRICULUM VITAE**

**Adam Pawel Szczepaniak**

**Current position:** Professor, Indiana University

### **Address:**

Physics Department  
Indiana University  
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### **Education:**

Ph.D. Theoretical Physics, December 1990, University of Washington  
Thesis Title: "A study of the Exclusive Nonleptonic Decays of Heavy Mesons"  
Advisor : E.M. Henley  
M.S. (Honors) Theoretical Physics, University of Warsaw, Poland, 1988  
B.Sc. National Autonomous University of Mexico, Mexico, 1988

### **Employment History:**

Director, Joint Physics Analysis Center,  
Thomas Jefferson National Accelerator Facility and Indiana University  
September 2013 -  
Chair, Physics Department, Indiana University  
July 2012 - July 2013  
Professor, Physics Department, Indiana University  
July 2007 -  
Director, Indiana University Nuclear Theory Center  
July 2003 - July 2009  
Visiting Professor, University of Genoa, Genoa, Italy  
October 2007 -December 2007  
Visiting Professor, Instituto Superior Technico, Lisbon, Portugal  
August 2007 - October 2007  
Associate Professor, Physics Department, Indiana University,  
July 2003 - July 2007  
Assistant Professor, Physics Department, Indiana University,  
January 1998 - July 2003  
Research Assistant Professor, Department of Physics, North Carolina State University,  
January 1996 - December 1997  
Postdoctoral Research Associate, Department of Physics, North Carolina State University,  
September 1992 - December 1995  
Postdoctoral Research Associate, Department of Physics, Florida State University,

October 1990 - August 1992

Research Assistant and Teaching Assistant, Department of Physics, University of Washington,  
January 1989-October 1990

Research Fellow, Instituto de Fisica, National Autonomous University of Mexico,  
November 1987-November 1988

**Awards:**

Fellow American Physical Society, 2011

Outstanding contribution to physics education, IU 2001,2011

Indiana University Trustees Teaching Award, 2002,2008

Konopinski Teaching Award for junior faculty, IU 2001

Sebastian Karrer prize, Physics, University of Washington, 1990

University of Mexico scholarship, Mexico 1987-1988

Mexican Ministry of Foreign Affairs stipend, Mexico 1987-1988

University of Warsaw scholarship award, Warsaw 1983-1987

Laureate of the Polish National Physics Olympiad, Warsaw 1983

**Recent Grants:**

"Summer School in Reaction Theory", NSF, (pending)

"Summer School in Reaction Theory", NSF, (2015)

"Physics Information Frontier: Extensible Computational Services for Discovery  
of New Particles", NSF, (2014-)

"Building a Community of Women in Science and Mathematics", NSF S-STEM (2013-2016)

"Discovering new Particles on the Cloud, IUCRG (2013-2014)

"RHIC Physics Fellow Program Agreement between RIKEN, Brookhaven National Laboratory  
and Indiana University", BNL, (2011-)

"Theoretical Studies in Medium-Energy Nuclear and Hadronic Physics", DOE, 1998-present

"Confined gluon dynamics: from monopoles to constituent gluons",  
funding of a postdoctoral fellowship from CONACyT, Mexico 2011-2012

"Amplitude Analysis in Hadron Spectroscopy" (funding for ECT\* workshop 2011)

"Linkage Program", Australian Research Council, 2006-2010

"National Nuclear Summer School", NSF, 2006

"Research Experience for Undergraduates", NSF, 2004-2007

"National Nuclear Summer School, NSF, 2006

**Teaching (past ten years):**

Introductory, Physics Honors, Quantum Many-Body Theory, Modern Physics,  
Subatomic Physics

Lecturer: Summer School in Reaction Theory

Lecturer: School on Amplitude Analysis in Modern Physics from hadron spectroscopy  
to CP phases, Bad Honnef, August 2011

Lecturer: 40th Latin-American School of Physics, Mexico City, Mexico, 2010

**Student supervision:**

Graduate students (chair):

A. Juckura, N.Sherrill, (current)

P.Guo Ph.D. 2009,Title:Quarkonium hybrid spectrum in Coulomb gauge QCD

P.Krupinski Ph.D 2005,Title:Gluonic degrees of freedom in Coulomb gauge QCD Hamiltonian

N.Poplawski Ph.D 2004,Title:A Relativistic description of hadronic decays of the exotic meson  $\pi_1$

M.Swat Ph.D 2003,Title:Study of  $\eta\pi$  spectra : search for exotic meson

Graduate students (co-chair):

G.Galata, (U.Genoa), A.Celentano (U.Genoa), A.Konycev (IU)

Undergraduate students:

E.Alexeev (current), S.Lombardo, A.Ostrander, D.Anderson, K.Moody, B.Jennings,

D.Whittington, P.Powell, M.Karch, J.Pacold, S.Lewis, N.Ussembayev

**Selected Professional and Academic Service:**

Limited membership CLAS collaboration

Limited membership COMPASS collaboration

Limited membership LHCb collaboration

Limited membership Babar collaboration

PWA consultant to COMPASS, BESIII, GlueX, CLAS

Member of the Coordinating Committee of Germany-U.S. Nuclear Theory

Member of the International PhD studies program under the project "Relativistic description of gluons in hadrons", (Warsaw, Poland), 2010-present

National Institute of Science and Technology, Brazil, IAC, 2016-present

Exchange Program for QCD Studies of Hadrons and Nuclei (GAUSTEQ)

International Advisory Committee for ATHOS 2017

International Advisory Committee for HADRONS 2017

International Advisory Committee for IWSS 2017

International Advisory Committee Symposium on Nuclear Physics, Mexico 2011-present

Co-organizer, Summer School in Reaction Theory, IU, 2015

Co-organizer, ATHOS 2015, GWU, April 2015

Co-organizer, Amplitude Analysis in Hadron Spectroscopy, ECT\*, Trento, January 2011

Co-organizer, PWA-work day, JLab, July, 2011

International Advisory Committee for: Topical QCD, Australia, 2010

Co-Director of the Physics Department GAANN program (2007-2010)

Convener, Int. Conf. Confinement 2010, St Petersburg, Russia,September, 2014

Convener, Int. Conf. Confinement 2010, Munich, Spain September, 2012

Convener, Int. Conf. Confinement 2010, Madrid, Spain September, 2010

Convener, Int. Conf. Confinement 2008, Mainz, Germany September, 2008

International Advisory Committee, QNP2008, Beijing, June, 2008

Co-Chair, National Nuclear Physics Summer School, Bloomington, July 2006

Convener, Int. Conf. Confinement 2006, Azores, September, 2006

Hall D Collaboration Board, 2000-2006

International Advisory Committee, QNP2006, Madrid, June, 2006

Organizer, QCD and Data Analysis, Workshop, February 2005  
Co-Chair of the QNP2004 International Conference  
Co-organizer, Workshop on Partial Wave Analysis, CMU, June, 2002  
IU Physics Department, Executive Committee (member, 2003-2009,2011-present)  
IU Physics Department, Graduate Admissions and Financial Support Committee,  
Chair (2008-present)  
Advanced College Program Physics coordinator, IU 2000-2003  
Referee for Physical Review Letters, Physical Review, Nuclear Physics,  
Physics Letters, Physics Reports, Eur. J. Phys., Acta Phys. Pol.  
NSF, Grant review panel member, reviewer of DOE and NSF grants  
APS, Hadronic Physics Topical Group, fellowship committee, 2005 member  
Sigma Xi, President IU Chapter, 2001-2003

## Publications

### Research Journals

1. "Amplitude analysis and the nature of the  $Z_c(3900)$ ", A. Pilloni *et al.*, arXiv:1612.06490 [hep-ph] *submitted to Phys. Lett.*
2. "Three-body final state interaction in  $\eta \rightarrow 3\pi$  revisited," P. Guo, I. V. Danilkin, C. Fernandez-Ramirez, V. Mathieu and A. P. Szczepaniak, *submitted to Phys. Lett.*
3. "Emergent Kink Statistics at Finite Temperature," M. A. Lopez-Ruiz, T. Yenez-Martinez, A. P. Szczepaniak and J. Liao, arXiv:1605.08017 [nucl-th]. *submitted to Phys. Rev. D*
4. "Finite-Energy Sum Rules in Eta Photoproduction off the Nucleon," J. Nys *et al.* Phys. Rev. D **D95**, 034014 (2017)
5. "Studying the  $P_c(4450)$  resonance in  $J/\psi$  photoproduction off protons," A. N. H. Blin, C. Fernandez-Ramirez, A. Jackura, V. Mathieu, V. I. Mokeev, A. Pilloni and A. P. Szczepaniak, Phys.Rev. D **D94**, 034002 (2016)
6. "Understanding the Nature of  $\Lambda(1405)$  through Regge Physics," C. Fernandez-Ramirez, I. V. Danilkin, V. Mathieu and A. P. Szczepaniak, Phys. Rev. D **93**, 074015 (2016)
7. "Coupled-Channel Model for  $\bar{K}N$  Scattering in the Resonant Region" C. Fernandez-Ramirez, I.V. Danilkin, D.M. Manley, V. Mathieu, A.P. Szczepaniak, JLAB-THY-15-2152, arXiv:1510.07065, Phys.Rev. D93 (2016) 034029
8. "Dalitz plot distributions in presence of triangle singularities" A. P. Szczepaniak Phys.Lett. B757 (2016) 61
9. "Constituent gluons and the static quark potential" J.Greensite, A.P. Szczepaniak Phys.Rev. D93 (2016) , 074506
10. "Toward Complete Pion Nucleon Amplitudes " V. Mathieu, I.V. Danilkin, C. Fernandez-Ramirez, M.R. Pennington, D. Schott, A.P. Szczepaniak, G. Fox, Phys.Rev. D92 (2015) 7, 074004.
11. "Amplitude analysis of the  $\pi^0\pi^0$  system produced in radiative  $J/\psi$  decays", BESIII Collaboration, M. Ablikim *et al.* Phys.Rev. D92 (2015) 5, 052003.
12. "Neutral Pion Photoproduction in a Regge Model" V. Mathieu, G. Fox, A.P. Szczepaniak, Phys.Rev. D92 (2015) 7, 074013.
13. "Three-body final state interaction in  $\eta \rightarrow 3\pi$ , P. Guo, I.V. Danilkin, D.Schott, C. Fernandez-Ramirez, V. Mathieu, A.P. Szczepaniak, Phys.Rev. D92 (2015) 5, 054016.

14. "Dispersive calculation of complex Regge trajectories for the lightest  $f_2$  resonances" J. A. Carrasco, J. Nebreda, J. R. Pelaez and A. P. Szczepaniak, arXiv:1504.03248, Phys.Lett. B749, 399 (2015).
15. "Triangle Singularities and XYZ Quarkonium Peaks", A. P. Szczepaniak, arXiv:1501.01691, Phys.Lett. B747, 410 (2015).
16. "Analysis Tools for Next-Generation Hadron Spectroscopy Experiments" M. Battaglieri *et al.*, White paper, Acta Phys.Polon. B46, 257 (2015).
17. "Double-Regge Exchange Limit for the  $\gamma p \rightarrow K^+ K^- p$  Reaction", M. Shi, I.V. Danilkin, C. Fernandez-Ramrez, V. Mathieu, M.R. Pennington, D. Schott, A.P. Szczepaniak Phys.Rev. D91 (2015) 3, 034007.
18. "Coulomb string tension, asymptotic string tension, and the gluon chain", J.Greensite, A.P.Szczepaniak, Phys.Rev. D91 (2015) 3, 034503.
19. "Dispersive approaches for three-particle final state interaction", P.Guo, I.V. Danilkin, A.P. Szczepaniak, Eur.Phys.J. A51 (2015) 10, 135.
20. "Dispersive Analysis of  $\omega\phi \rightarrow 3\pi, \pi\gamma^*$  I.V. Danilkin, C. Fernandez-Ramrez, P. Guo, V. Mathieu, D. Schott, M. Shi, A.P. Szczepaniak, Phys.Rev. D91 (2015) 9, 094029.
21. "Application of the Veneziano Model in Charmonium Dalitz Plot Analysis", A. P. Szczepaniak and M. R. Pennington, Phys. Lett. B**739**, 283 (2014).
22. "Charmonium meson and hybrid radiative transitions", P. Guo, T. Yepez Martinez and A. P. Szczepaniak, Phys.Rev. D**89** (2014) 116005.
23. "Identification of non-ordinary mesons from the dispersive connection between their poles and their Regge trajectories: the  $f_0(500)$  resonance," J.T.Londergan, J.Nebreda, J.R.Pelaez, A.P. Szczepaniak, Phys.Lett. B729, 9 (2014).
24. "An initial study of mesons and baryons containing strange quarks with GlueX," arXiv:1305.1523 [nucl-ex]. A. AlekSejevs *et al.* [GlueX Collaboration],
25. " $\mu-H$  Lamb shift: dispersing the nucleon-excitation uncertainty with a finite energy sum rule," M. Gorchtein, F. J. Llanes-Estrada and A. P. Szczepaniak, Phys. Rev. A 87, **052501** (2013)
26. "The coupled-channel and three-particle system on a torus" , P.Guo, J.Dudek, R.Edwards and A.P.Szczepaniak, Phys. Rev. D **88**, 014501 (2013)
27. "Gluon chain formation in presence of static charges", A.Ostrander, E.Santopinto, A.P.Szczepaniak, A.Vassallo, Phys. Rev. D86, 114015 (2012).

28. "Coulomb gauge Yang-Mills theory at finite temperatures: glueballs versus quasi-gluons", T. Y. Martinez, A. P. Szczepaniak and H. Reinhardt, Phys. Rev. D86, 076010 (2012).
29. "Explicit Model Realizing Parton-Hadron Duality," L. L. Jenkovszky, V. K. Magas, J. T. Londergan and A. P. Szczepaniak, Int.J. Mod.Phys. A27, 1250157 (2012).
30. "The Gribov horizon and the one-loop color-Coulomb potential," M. Golterman, J. Greensite, S. Peris and A. P. Szczepaniak, Phys. Rev. D85: 085016 (2012).
31. "Amplitudes for the analysis of the decay  $J/\psi \rightarrow K^+K^-\pi^0$ ," P. Guo, R. Mitchell, M. Shepherd, A. P. Szczepaniak, Phys. Rev. D85: 056003 (2012).
32. "Form factors of pseudoscalar mesons", M.Gorchtein, P.Guo, A.P. Szczepaniak, Phys.Rev. C86: 015205 (2012).
33. "Compton Scattering and Photo-absorption Sum Rules on Nuclei" Mikhail Gorchtein, Timothy Hobbs, J.Timothy Londergan, Adam P. Szczepaniak, Phys.Rev.C84: 065202 (2011).
34. "Amplitude analyses of the decays  $\chi_{c1} \rightarrow \eta\pi^+\pi^-$  and  $\chi_{c1} \rightarrow \eta'\pi^+\pi^-$ . CLEO Collaboration (G.S. Adams et al.) Phys.Rev.D84:112009 (2011).
35. "Schwinger-Dyson equations and disorder" Adam P. Szczepaniak, Hugo Reinhardt, Phys.Rev.D84:056011 (2011).
36. "Variational approach to Yang-Mills theory at finite temperatures" H. Reinhardt, D.R. Campagnari, A.P. Szczepaniak, Phys.Rev.D84:045006 (2011).
37. "Testing Proposals for the Yang-Mills Vacuum Wavefunctional by Measurement of the Vacuum." J. Greensite, H. Matevosyan, S. Olejnik, M. Quandt, H. Reinhardt, A.P. Szczepaniak, Phys.Rev.D83:114509 (2011).
38. "The role of P-wave inelasticity in  $J/\psi$  to  $\pi^+\pi^-\pi^0$ ", P. Guo, R. Mitchell, A. P. Szczepaniak, Phys. Rev.D82, 094002 (2010).
39. "P-wave pi pi amplitude from dispersion relations", A.P. Szczepaniak, P.Guo, M. Battaglieri, R. De Vita, Phys. Rev. D82, 036006 (2010).
40. "Quark-nucleon dynamics and Deep Virtual Compton Scattering", M. Gorchtein, A.P. Szczepaniak, Phys. Rev. D82, 014006 (2010).
41. "A model for QCD ground state with magnetic disorder", A.P. Szczepaniak, H. H. Matevosyan, Phys. Rev. D81, 094007 (2010).

42. "A Solvable Model for Many Quark Systems in QCD Hamiltonians", T. Yepez-Martinez, P.O. Hess, A.P. Szczepaniak, O.Civitarese, Phys. Rev. C **81**, 045204 (2010).
43. "Photoproduction of  $\pi^+\pi^-$  meson pairs on the proton". M. Battaglieri, R. De Vita, A. P. Szczepaniak [CLAS Collaboration], Phys.Rev.D80:072005,2009.
44. "Chiral symmetry restoration and deconfinement in Coulomb Gauge QCD." P. Guo, Adam P. Szczepaniak, Phys.Rev.D79:116006,2009.
45. "Local Two-Photon Couplings and the J=0 Fixed Pole in Real and Virtual Compton Scattering." S.J. Brodsky, F.J. Llanes-Estrada, A.P. Szczepaniak, Phys.Rev.D79:033012,2009.
46. "First measurement of direct  $f_0(980)$  photoproduction on the proton," M. Battaglieri, R. De Vita and A. P. Szczepaniak [CLAS Collaboration], Phys. Rev. Lett. 102:102001,2009.
47. "Regge Exchange Contribution to Deeply Virtual Compton Scattering," A. P. Szczepaniak, J. T. Londergan, and F. J. Llanes-Estrada, Acta Phys.Polon.B40:2193,2009.
48. "Low energy theorem for virtual Compton scattering and generalized sum rules of the nucleon," M. Gorchtein, A. P. Szczepaniak, Phys. Rev. Lett. **101**, 141601 (2008).
49. "Heavy quarkonium hybrids from Coulomb gauge QCD," P. Guo, A. P. Szczepaniak, G. Galata, A. Vassallo, E. Santopinto, Phys. Rev. D **78**, 056003 (2008).
50. "A Numerical Approach to Coulomb Gauge QCD," H. H. Matevosyan, A. P. Szczepaniak, P. O. Bowman, Phys. Rev. D **78**, 014033 (2008).
51. "Chiral symmetry and excited baryons," A. V. Nefediev, J. E. F. Ribeiro, A. P. Szczepaniak, JETP Lett. **87**, 271 (2008).
52. "Subcritical solution of the Yang-Mills Schroedinger equation in the Coulomb gauge," D. Epple, H. Reinhardt, W. Schleifenbaum, A. P. Szczepaniak, Phys. Rev. D **77**, 085007 (2008).
53. "Gluelump spectrum from Coulomb gauge QCD," P. Guo, A. P. Szczepaniak, G. Galata, A. Vassallo, E. Santopinto, Phys. Rev. D **77**, 056005 (2008).
54. "Microscopic derivation of the pion coupling to heavy-light mesons," A. V. Nefediev, J. E. F. Ribeiro, A. P. Szczepaniak, Phys. Rev. D **75**, 036001 (2007).
55. "Exclusive electroproduction and the quark structure of the nucleon", A.P. Szczepaniak, J.T. Londergan, Phys. Lett. B. **643**, 17 (2006).
56. "Energy spectrum of the low-lying gluon excitations in the Coulomb gauge", A.P. Szczepaniak, P. Krupinski, Phys. Rev. D **73**, 116002 (2006).

57. "Coulomb energy and gluon distribution in the presence of static sources", A.P. Szczepaniak, P. Krupinski, Phys. Rev. D **73**, 034022 (2006).
58. "A partial wave analysis of the  $\pi^-\pi^-\pi^+$  and  $\pi^-\pi^0\pi^0$  systems and the search for a  $J^{PC} = 1^{-+}$  meson", A. Dzierba, *et al.*, Phys. Rev. D **73**, 072001 (2006).
59. "An exactly solvable limit of low energy QCD", P.O. Hess, A.P. Szczepaniak, Phys. Rev. C **73**, 025201 (2006).
60. "Final state interactions in decays of the exotic  $\pi_1$  meson", N.J. Poplawski, A.P. Szczepaniak, J.T. Londergan, Phys. Rev. D **71**, 056003 (2005).
61. "Diffractive photoproduction of opposite-charge pseudoscalar meson pairs at high energies", A. Szczurek, A.P. Szczepaniak, Phys. Rev. D **71**, 054005 (2005).
62. "Towards a relativistic description of exotic meson decays", N.J. Poplawski, A.P. Szczepaniak, J.T. Londergan, Phys. Rev. D **71**, 016004 (2005).
63. "Chromo-electric flux tubes", P.O. Bowman, A.P. Szczepaniak, Phys. Rev. D **70**, 016002 (2004).
64. "Hyperfine meson splittings: Chiral symmetry versus transverse gluon exchange", F.J. Llanes-Estrada, S.R. Cotanch, A.P. Szczepaniak, E.S. Swanson, Phys. Rev. C **70**, 035202 (2004).
65. "The evidence for a pentaquark signal and kinematic reflections", A.R. Dzierba, D.Krop, M. Swat, S. Teige, A.P. Szczepaniak, Phys. Rev. D **69**, 051901 (2004).
66. "K anti-K photoproduction and S - P wave interference", L. Bibrzycki, L. Lesniak, AP. Szczepaniak, Eur. Phys. J. C **34**, 335 (2004).
67. "Confinement and gluon propagator in Coulomb gauge QCD", A.P. Szczepaniak, Phys. Rev. D **69**, 074031 (2004).
68. "Study of the  $\eta\pi$  and  $\eta'\pi$  spectra and interpretation of possible exotic  $J^{PC} = 1^{-+}$  mesons", A.P. Szczepaniak, M. Swat, A.R. Dzierba, S. Teige, Phys. Rev. Lett. **91**, 092002 (2003).
69. "Separation of soft and hard physics in DVCS", A. Gärdestig, A.P. Szczepaniak, J.T. Londergan, Phys.Rev.D **68**, 034005 (2003).
70. "Description of the  $D_s^*(2320)$  resonance as the  $D\pi$  atom", A.P. Szczepaniak, Phys.Lett.B **567**, 23 (2003).
71. "Theoretical model of the  $\phi$  meson photoproduction amplitudes", L. Lesniak, A.P. Szczepaniak, Acta Phys.Polon.B **34**, 3389 (2003).

72. "The Low lying glueball spectrum", A.P Szczepaniak, E.S Swanson, Phys.Lett.B **577**, 61 (2003).
73. "Nonlinear Regge trajectories and glueballs", M.M. Brisudova, L. Burakovsky, T. Goldman, A.P. Szczepaniak, Phys. Rev. D**67**, 094016 (2003).
74. "Special relativity constraints on the effective constituent theory of hybrids", S.D. Glazek, A.P. Szczepaniak, Phys. Rev. D**67**, 034019 (2003).
75. "A Study of the  $\eta\pi^0$  Spectrum and Search for a  $J^{PC} = 1^{-+}$  Exotic Meson", A.Dzierba *et al.*, Phys. Rev. D**67**, 094015 (2003).
76. "QCD glueball Regge trajectories and the Pomeron", F.Llanes-Estrada, S.R.Cotanch, P.Bicudo, E.Ribeiro, A.P.Szczepaniak, Nucl. Phys. **A710**, 45 (2002).
77. "Spontaneous chiral symmetry breaking in the linked cluster expansion", A.P. Szczepaniak, P. Krupinski, Phys. Rev.D**66**, 096006 (2002).
78. "Chirally symmetric quark description of low energy  $\pi - \pi$  scattering ", P. Bicudo, S. Cotanch, F. Llanes-Estrada, P. Maris, E. Ribeiro, A.P. Szczepaniak, Phys. Rev. D**65**, 076008 (2002).
79. "Coulomb gauge QCD, confinement and the constituent representation", A.P. Szczepaniak, E.S. Swanson, Phys. Rev. D**65**, 025012 (2002).
80. "Chiral extrapolations and exotic meson spectrum", A.W.Thomas, A.P.Szczepaniak, Phys. Lett. B**526**, 72 (2002).
81. "A partial wave analysis of the  $\pi^0\pi^0$  system produced in  $\pi^-p$  charge exchange collisions", J.Gunter *et al.*, Phys. Rev. D**64**, 072003 (2001).
82. "Background enhancement of CPT reach at an asymmetric  $\phi$  factory", N.Isgur, V.A.Kostelecky, A.P.Szczepaniak, Phys. Lett. B**515**, 333 (2001).
83. "Relativistic unitary description of  $\pi \pi$  scattering", M.A. Pichowsky, A.P. Szczepaniak, J.T. Londergan, Phys. Rev. D**64**, 036009 (2001).
84. "Chiral extrapolation, renormalization and the viability of the quark model", A.P. Szczepaniak, E.S. Swanson, Phys. Rev. Lett **87**, 072001 (2001).
85. "Role of photoproduction in exotic meson searches", A.P.Szczepaniak, M.Swat, Phys. Lett. B**516**, 72 (2001).
86. "Meson spectroscopy with high energy photon beam at JLab", A.P.Szczepaniak, Acta. Phys. Pol. **31**, 2605, (2000).

87. "Nonperturbative renormalization and the QCD vacuum", A.P. Szczepaniak, E.S. Swanson, Phys. Rev. D62, 094027, (2000).
88. "Charge exchange  $\rho^0\pi^+$  photoproduction and implications for searches of exotic meson", A.Afanasev, A.P.Szczepaniak, Phys. Rev. D61, 114008 (2000).
89. "Renormalized effective QCD Hamiltonian: Gluonic sector", D.Robertson, E.Swanson, A.P.Szczepaniak, C-R.Ji, S.R.Cotanch. Phys. Rev. D59, 074019, (1999).
90. "Hybrid meson decay phenomenology", P.R.Page, E.S.Swanson, A.P.Szczepaniak, Phys. Rev. D59, 034016, (1999).
91. "Sudakov suppression in the soft heavy to light meson transition form factor", A.P.Szczepaniak, A.V.Radyushkin, Phys. Rev. D59, 034017, (1999).
92. "Heavy hybrids with constituent glue", E.S.Swanson, A.P.Szczepaniak, Phys. Rev. D59, 014035, (1999).
93. "Exotic mesons and structure of soft glue", A.P.Szczepaniak, Acta. Phys. Pol. B29, 3429 (1998).
94. "Coupled channel analysis of S wave  $\pi\pi$  and  $K\bar{K}$  photoproduction", C.-R.Ji, R.Kaminski, L.Lesniak, A.P.Szczepaniak, R.Williams Phys. Rev. C 58, 1205 (1998).
95. "Consistent analysis of  $O(\alpha_s)$  corrections to pion elastic form factor", A.P.Szczepaniak, A.V.Radyushkin, C.-R. Ji, Phys. Rev. D 57, 2813 (1998).
96. "Decays of hybrid mesons", A.P.Szczepaniak, E.S.Swanson, Phys. Rev. D 56, 5692 (1997).
97. "On the Dirac structure of confinement", A.P.Szczepaniak, E.S.Swanson, Phys. Rev. D 55, 3987 (1997).
98. "From current to constituent quarks: a renormalization group improved Hamiltonian based description of hadrons", A.P.Szczepaniak, E.S.Swanson, Phys. Rev. D 55, 1578 (1997).
99. "Leading order QCD corrections to the heavy to light meson transition form factor", A.P.Szczepaniak, Phys.Rev. D 54, 1167 (1996).
100. "Glueball spectroscopy in a relativistic many-body approach to hadron structure", A.P.Szczepaniak, E.Swanson, C.R.Ji, S.R.Cotanch, Phys. Rev. Lett. 76, 2011 (1996).
101. "Pion form factors at intermediate momentum transfer", A.P.Szczepaniak, A.G.Williams, Int. J.Mod. Phys. A11, 655 (1996).

102. "Baryons in a relativistic constituent quark model", A.P.Szczepaniak, C.R.Ji, S.R.Cotanch, Phys. Rev. C 52, 2738 (1995).
103. "Light-cone view on the applicability of perturbative QCD for exclusive processes", A.Pang, C.R.Ji, A.P.Szczepaniak, Phys. Rev. D 52, 4038 (1995).
104. "Quantization dependence in a constituent quark model", A.P.Szczepaniak, C.R.Ji, S.R.Cotanch, Phys. Rev. D 52, 5204 (1995).
105. "Effective degrees of freedom in hadronic structure", A.P.Szczepaniak, Revista Mexicana de Fisica, 40, 337 (1994).
106. "Significant nonvalence components in Heavy Quark Symmetry", A.P.Szczepaniak, C.R.Ji, S.R.Cotanch, Phys. Rev. Lett. 72, 2537 (1994).
107. "Generalized relativistic quark meson wave function", A.P.Szczepaniak, C.R.Ji, S.R.Cotanch, Phys. Rev. D49, 3466 (1994).
108. "Model analysis of the nonleading twist contributions to the pion electromagnetic form factor", A.P.Szczepaniak, A.G.Williams, Phys. Lett. B302, 97 (1993).
109. "Covariant model for a fermion-antifermion bound state with harmonic confinement", A.P.Szczepaniak, A.G.Williams, Phys. Rev. D47, 1175 (1993).
110. "End point behavior of the pion distribution amplitude", A.P.Szczepaniak, L.Mankiewicz, Phys. Lett B266, 153 (1991).
111. "QCD corrections to the CP asymmetries in B decays to CP-Eigenstates", A.P.Szczepaniak, E.M.Henley, Phys. Lett. B250, 130 (1990).
112. "Perturbative QCD effects in heavy meson decays", A.P.Szczepaniak, E.M.Henley, S.J.Brodsky, Phys. Lett. B243, 287 (1990).
113. "Quark spin and momentum distribution of the nucleon", Z.Dziembowski, L.Mankiewicz, H.Weber, A.P.Szczepaniak, Phys. Rev. D39, 3257 (1989).
114. "The Dirac Oscillator", M.Moshinsky, A.P.Szczepaniak, J. Phys. A22, L817 (1989).
115. "Relativistic symplectic model for scalar-quark systems", M.Moshinsky, A.P.Szczepaniak, Nuc. Phys. B6, 76 (1989).
116. "Coherent states and accidental degeneracy for a charged particle in a magnetic field", G.Loyola, M.Moshinsky, A.P.Szczepaniak, Am. J. Phys. 57, 811 (1989).
117. "Magnetic moments of the nucleon octet in a relativistic light-cone quark model", Z.Dziembowski, T.Dzurak, L.Mankiewicz, A.P.Szczepaniak, Phys. Lett. B200, 539 (1988).

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118. "Amplitude analysis of resonant production in three pions" A. Jackura, M. Mikhasenko and A. Szczepaniak, arXiv:1610.04567 [hep-ph], EPJ Web Conf. 130 (2016) 05008.
119. "Issues and Opportunities in Exotic Hadrons R.A. Briceno *et al.* arXiv:1511.06779, Chin.Phys. C40 (2016) no.4, 042001.
120. "Hyperon Studies at JPAC," C. Fernandez-Ramirez and A. Szczepaniak, arXiv:1604.02141, in proceedings of the Physics with Neutral Kaon Beam at JLab Workshop, February 2016, JLab, Newport News, VA
121. "Analytical improvements to the Breit-Wigner isobar models" , A. P. Szczepaniak JLAB-THY-15-2149, arXiv:1510.00695, in LHCb workshop on multi-body decays of B and D mesons.
122. "Calculation of Regge Trajectories from Elastic Scattering Poles and the Non-ordinary  $f_0(500)$  Meson", J.R. Peláez, J.A. Carrasco, J.T. Londergan, J. Nebreda, A.P. Szczepaniak Acta Phys.Polon.Supp. 8 (2015) 1, 89.
123. "Regge trajectory of the  $f_0(500)$  resonance from a dispersive connection to its pole", J. Nebreda, J.T. Londergan, J.R. Pelaez, A.P. Szczepaniak, JLAB-THY-13-1796 , in 7th International Symposium on Chiral Symmetry in Hadrons and Nuclei (CHIRAL 13)
124. "Coulomb gauge approach for charmonium meson and hybrid radiative transitions" P. Guo, T. epez-Martinez and A. P. Szczepaniak, J. Phys. Conf. Ser. **578**, no. 1, 012016 (2015).
125. "Regge trajectories of ordinary and non-ordinary mesons from their scattering poles" J. Nebreda, *et al.*, arXiv:1412.5894. XIth International Conference on Quark Confinement and the Hadron Spectrum, Saint Petersburg, Russia, September, 2014.
126. "HASPECT: HAdron SPEctroscopy CenTer, E. Santopinto, *et al.* , J.Phys.Conf.Ser. 527 (2014) 012028.
127. "Low energy hadron phenomenology" A.P. Szczepaniak, EPJ Web Conf. 73 (2014) 01015.
128. "The non-ordinary Regge behavior of the  $f_0(500)$  meson" J.R. Peaez, *et al.*, Acta Phys.Polon.Supp. 7 (2014) 3, 539.
129. "The non-ordinary Regge behavior of the  $f_0(500)$  meson", J. R. Pelez, J. T. Londergan, J. Nebreda and A. P. Szczepaniak, Wild Things 2013 Conference, Feb 2013. Chicago, IL, USA.

130. "Regge trajectory of the  $f_0(500)$  resonance from a dispersive connection to its pole", J. Nebreda, J. T. Londergan, J. R. Pelaez and A. P. Szczepaniak, The Seventh International Symposium on Chiral Symmetry in Hadrons and Nuclei (CHIRAL 13), Oct 2013. Beijing, China.
131. "Regge trajectory of the  $f_0(500)$  resonance from a dispersive connection to its pole", J. Nebreda, J. T. Londergan, J. R. Pelaez, A. P. Szczepaniak, Hadrons2013, November, 2013, Narita Japan.
132. "PWA tools in Hadronic Spectroscopy," S. Ceci, M. Doring, E. Epple, C. Fernandez-Ramrez, A. Fix, M. Fritsch, R. W. Gothe and B. Grube *et al.*, arXiv:1304.5896 [nucl-th].
133. "Form factors of pseudoscalar mesons in a model with unitarity and Regge exchanges" M. Gorchtein, P. Guo and A. P. Szczepaniak, Acta Phys. Polon. Supp. **6**, 151 (2013).
134. "Schwinger-Dyson equations and disorder," A. P. Szczepaniak, PoS QCD -**TNT-II**, 045 (2011).
135. "QCD at low energy: A many-body approach" T. Yepez-Martinez, P.O. Hess, S. Lerma, A.P. Szczepaniak, O. Civitarese, J. Phys. Conf. Ser.322, 012016 (2011).
136. "Analytic solutions of QCD motivated Hamiltonians at low energy," T. Yepez, A. Amor, P. O. Hess, A. Szczepaniak, O. Civitarese, Int. J. Mod. Phys. E **20**, 192 (2011).
137. "Asymptotic Behavior of Pion Form Factors," M. Gorchtein, P. Guo and A. P. Szczepaniak, DIS2011, arXiv:1106.5252 [hep-ph], (2011).
138. "Symmetries in QCD and the hadronic world". A.P. Szczepaniak, AIP Conf.Proc.1334, 341 (2011).
139. "Quark-nucleon dynamics and deeply virtual Compton scattering", M. Gorchtein, A. Szczepaniak", PoS DIS2010:229, (2010).
140. "Reggeon Non-Factorizability and the  $J=0$  Fixed Pole in DVCS." S.J. Brodsky, F.J. Llanes-Estrada, T.Londergan, Adam P. Szczepaniak, in proceedings of 17th International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS 2009), Madrid, Spain, 26-30 Apr (2009).
141. "Chiral symmetry in excited baryons." A.V. Nefediev, J.E.F.T. Ribeiro, Adam P. Szczepaniak, PoS CONFINEMENT8:071,(2008).
142. "Illuminating the  $1/x$  moment of parton distribution functions," S. J. Brodsky, F. J. Llanes-Estrada, A. P. Szczepaniak, in proceedings of 11th International Conference on Meson-Nucleon Physics and the Structure of the Nucleon (MENU 2007), Julich, Germany.

143. "What is measured in hard exclusive electroproduction?," J. T. Londergan and A. P. Szczepaniak, in proceedings of In Hamburg 2007, Blois07, Forward physics and QCD, 51-56.
144. "The Deck effect in  $\pi N \rightarrow \pi\pi\pi N$ ", J. Dudek, A.P. Szczepaniak, AIP Conf. Proc. **814** (2006) 587.
145. "Theoretical aspects of pentaquark searches", A.P. Szczepaniak, AIP Conf. Proc. **792** (2005) 746.
146. "S - P wave interference in the  $K^+K^-$  photoproduction on hydrogen", L. Bibrzycki, L. Lesniak, A.P. Szczepaniak, Acta Phys. Polon. B **36**, 3889 (2005).
147. "Gluonic excitations and the GlueX experiment", A.P. Szczepaniak, J. Phys. Conf. Ser. **9** (2005) 315.
148. "Coulomb energy in QCD", A.P. Szczepaniak. P.O. Bowman, Nucl. Phys. Proc. Suppl. **141** (2005) 165.
149. "Reviewing the evidence for pentaquarks", A.R. Dzierba, C.A. Meyer, A.P. Szczepaniak, J. Phys. Conf. Ser. **9**, 192 (2005).
150. "Analysis of high energy  $K^+K^-$  photoproduction on hydrogen", L. Bibrzycki, L. Lesniak, A. P. Szczepaniak, Int. J. Mod. Phys. A **20**, 581 (2005).
151. "Chiral symmetry and hyperfine  $q\bar{q}$ ", F.J. Llanes-Estrada, S.R. Cotanch, A.P. Szczepaniak, E.S. Swanson, Eur. Phys. J. C **33**, S521 (2004).
152. "Meson Spectroscopy and overview of the GlueX/Hall D program at Jlab", A.P. Szczepaniak, in proceedings of the workshop on Lattice Hadron Physics, Carins, Australia, July 2003.
153. "Partial wave analysis", A.P. Szczepaniak, in proceedings of the Gluonic Excitations Workshop, Jlab, May 2003.
154. "Confinement and exotic meson spectroscopy at 12GeV Jlab", A.P. Szczepaniak, Braz. J. Phys. **33**, 174 (2003). Prepared for XXV Workshop on Nuclear Physics in Brazil.
155. "Nonresonant hadron-hadron interactions and final state interactions in the  $\eta\pi$  system, A.P. Szczepaniak, Int.J.Mod.Phys. A**18**, 405 (2003).
156. "Chirality and the quark model", E.S. Swanson, A.P. Szczepaniak, AIP Conf.Proc.**619**, 727 (2002).

157. "Covariant description of hadron Scattering processes", A. Gardestig, M.A. Pichowsky, A. Szczepaniak, J.T. Londergan, *in proceedings of Menu 2001*, July, 2001 Washington DC, PiN Newslett.**16**, 340 (2002).
158. A.Gardestig, A.P. Szczepaniak, J.T. Londergan, *in proceedings of, Exclusive Processes at High Momentum Transfer*, May 2002, JLab.
159. "Interpretation of the light exotic meson", A.P. Szczepaniak, *in proceedings of Meson 2002 International Conference*, May 2002, Krakow.
160. "A possible interpretation of the  $\pi_1(1400)$  exotic meson", A.P. Szczepaniak, *in proceedings of International Conference on Quark Nuclear Physics*, June 2002, Julich.
161. "Constructing confinement", E.S. Swanson, A.P. Szczepaniak, Lake Louise Winter Institute, march 2002.
162. "Confinement from Coulomb gauge QCD and exotic phenomenology", Workshop on Lepton Scattering, Hadrons and QCD, Adelaide, Australia, March, 2001.
163. "Key issues in hadronic physics", S. Capstick *et al.* White paper, Presented at APS Division of Nuclear Physics Town Meeting on Electromagnetic and Hadronic Physics, Newport News, Virginia, Dec, 2000.
164. "Studies of Coulomb Gauge QCD", in proceedings of ICIPNP, Quebec, Canada, May 22-28, 2000.
165. "Overview: The case for an Electron/Polarized Ion Collider", L.C. Bland, J.T. Londergan, A.P. Szczepaniak, EPIC'99 Bloomington, IN April 8-11, 1999.
166. "Physics with a high luminosity polarized electron ion collider", L.C. Bland, (ed.), J.T. Londergan, (ed.), A.P. Szczepaniak, (ed.), EPIC'99 Bloomington, IN April 8-11, 1999.
167. "Matching soft and hard contributions in form factors", A.P.Szczepaniak, in proceedings of the Workshop on Exclusive Processes, JLab, May 1999.
168. "CPT tests at TJNAF", A.P. Szczepaniak, Bloomington 1998, in proceedings of the Workshop on CPT and Lorentz symmetry.
169. "Threshold charm photoproduction", A.P. Szczepaniak, in proceedings of the JLab Users Workshop, Newport News, June, 1998.
170. "Renormalized effective Hamiltonian approach to QCD" D.G. Robertson, E.S. Swanson, A.P. Szczepaniak, C.R. Ji, S.R. Cotanch, Confinement III Conference, JLab, Newport News, VA, June, 1998.

171. "Soft Glue", to appear in proceedings of the Confinement III Conference, JLab, Newport News, VA, June, 1998.
172. "Heavy hybrids", in proceedings of the Workshop on Future Directions in Quark Nuclear Physics, Adelaide, March, 1998
173. "QCD Hamiltonian Approach for the glueball spectrum", S.R.Cotanch, A.P.Szczepaniak, E.S.Swanson, C.R.Ji, Nucl. Phys. A631, 640c (1998).
174. "Relativistic approach to hadron structure", A.P.Szczepaniak, Perspectives in hadronic physics, proc. ed. by S. Boffi, C. Ciofi Degli Atti, M. Giannini. (World Scientific, Singapore, 1997).
175. "Glueball spectroscopy in a many-body QCD Hamiltonian approach", S.R.Cotanch, A.P.Szczepaniak, E.S.Swanson, and C.R.Ji, 6th International Conference on the Intersections of Particle and Nuclear Physics, proc. ed. T.W. Donnelly. (AIP Conference Proceedings, Vol. 412, 1997).
176. "Light-Cone quark models of mesons", C.R.Ji, A.P.Szczepaniak, and S.R.Cotanch, International Workshop on Particle Theory and Phenomenology, proc. K.E.Lassila, J.Qiu, A.Sommerer, G.Valencia, K.Whisnant, and B.L.Young eds., (World Scientific, Singapore, 1997).
177. "Many-body Hamiltonian approach to QCD", A.P.Szczepaniak, S.R.Cotanch, E.S.Swanson, and C.R.Ji, XIV International Conference on Particles and Nuclei, proc., C.E.Carlson and J.J.Domingo eds., (World Scientific, Singapore, 1997).
178. "Many-body Hamiltonian approach to QCD", S.R. Cotanch, A. Szczepaniak, E.S. Swanson, C.R. Ji, Como 1996, Quark confinement and the hadron spectrum II.
179. "Many-body Hamiltonian approach to QCD", S.R.Cotanch, A.P.Szczepaniak, E.S.Swanson, and C.R.Ji, 2nd International Workshop on Quark Confinement and Hadron Structure, proc. N.Brambilla and G.M.Prosperi eds., (World Scientific, Singapore, 1997).
180. "A relativistic, many-body, QCD-based model of glueballs", E.S.Swanson and A.P.Szczepaniak, 6th International Conference on Hadron Spectroscopy, proc. M.C.Birse, G.D.Lafferty, and J.A.McGovern eds., (World Scientific, Singapore, 1996).
181. "Relativistic quark model baryon analysis", S.R.Cotanch, A.P.Szczepaniak, and C.R.Ji, XV European Few-Body Conference, proc., R.Guardiola ed., (Few-Body Systems Suppl., Springer, Austria, 1995).
182. "The constituent quark structure", A.P.Szczepaniak, Theory of Hadrons and Light-Front QCD, proc., S.Glazek ed. (World Scientific, Singapore, 1995).

183. "Relativistic quark model description of baryon properties", S.R.Cotanch, A.P.Szczepaniak, and C.R.Ji, 14th International Conference on Few Body Problems in Physics, proc., F.Gross ed., (AIP, 1995).
184. "On the constituent quark structure", A.P.Szczepaniak, C.R.Ji and S.R.Cotanch, 14th International Conference on Few Body Problems in Physics, proc., F.Gross ed., (AIP, 1995).
185. "Pion form factor", A.Pang, C.R.Ji, and A.Szczepaniak, Workshop on CEBAF at High Energies, proc., N.Isgur and P.Stoler, eds., (CEBAF, Newport News, 1994).
186. "Heavy meson form factors and the structure of a constituent quark", A.P.Szczepaniak, Cornelius Lanczos International Centenary Conference, proc., J.D.Brown, M.T.Chu, D.C.Ellison, and R.J.Plemmons eds., (SIAM, Philadelphia, 1994).
187. "Hamiltonian formulation of a simple covariant harmonic oscillator for bosons and fermions", A.P.Szczepaniak, Symmetries in Physics, proc., A.Frank and K.B.Wolf eds., (Springer-Verlag, New York, 1992).
188. "Perturbative QCD effects in heavy meson decays", A.P.Szczepaniak, E.M.Henley, and S.J.Brodsky, XII International Conference on Particles and Nuclei, proc., J.L.Matthews, T.W.Donnely, E.H.Farhi, and L.S.Osborne eds., (North-Holland, Amsterdam, 1991).
189. "The two body Dirac Oscillator", G.Loyola, M.Moshinsky and A.P.Szczepaniak, J.J.Giambiagi Festschrift, proc., H.Falomir, R.E.G.Saravi, P.L.Ferreira and F.A.Schaposnik eds., (World Scientific, Singapore, 1990).
190. "The Dirac Oscillator and its contribution to the baryon mass formula", N.Aquino, G.Loyola, M.Moshinsky, C.Villegas, and A.P.Szczepaniak, Relativistic Aspects of Nuclear Physics, proc., T.Kodama K.C.Chung, S.J.B.Duarte, and M.C.Nemes eds., (World Scientific, Singapore, 1990).
191. "Accidental degeneracy and structure of matter in strong magnetic Fields", G.Loyola, M.Moshinsky, A.P.Szczepaniak, Symmetries in Science III, proc., B.Gruber and F.Iachello eds., (Plenum Press, New York, 1989).
192. "Relativistic model of baryon valence-quark structure", A.P.Szczepaniak, Z.Dziembowski, T.Dzurak, and L.Mankiewicz, Physics at Future Accelerators, proc., Z. Ajduk ed., (University of Warsaw Press, Warsaw, Poland, 1988).

### Seminars, Colloquia, Invited Talks

1. "Hadron Spectroscopy" PWA9/ATHOS4, Bad Honnef, Germany, March 2017.
2. "JPAC and Hadron Spectrum", Bound States in QCD and Beyond", St. Goar, Germany, February 2017.
3. "JPAC Role in Spectroscopy Analysis", HASPEC collaboration meeting, Genoa, December 2016.
4. "JPAC Role in Baryon Spectroscopy Analysis",  $N^*$  Workshop, INT U. Washington, Seattle, WA 2016.
5. "Update from JPAC", CLAS collaboration meeting", Newport News, November, 2016.
6. "QCD bound states and the XYZ phenomena", Seminar, IFJ Krakow, Poland, October 2016.
7. "Interpreting peaks in partial waves", LHCb Workshop, CERN. October, 2016.
8. "New opportunities in hadron spectroscopy", Various Faces of QCD Workshop, Swierk, Poland, October, 2016.
9. "Introduction to JPAC", DOE Comparative Review, Bethesda, MD, August 2016.
10. "Particle physics on the cloud and rebirth of hadron spectroscopy", ICN-UNAM, Colloquium, Mexico DF, August, 2016.
11. "QCD Bound States and the XYZ Phenomena", 5th International Conference on New Frontiers in Physics (ICNFP 2016), Crete, Greece, July 2016.
12. "Hadron reactions and spectroscopy studies at the Joint Physics Analysis Center", Mesons 2016 International Conference, Krakow, Poland, June 2016.
13. "Hadron reactions and spectroscopy studies at the Joint Physics Analysis Center ", A New Era for Hadro-Particle Physics Workshop, JLab, Newport News, June 2016.
14. "Update from JPAC", Users Meeting, JLab, Newport News, June 2016.
15. "Resonance Extraction and JPAC integrations with GlueX", GlueX Physics Workshop, JLab, Newport News, May 2016.
16. "Joint Physics Analysis Center", JPAC External Review, JLab, Newport News, May 2016.

17. "What do we learn about QCD from meson spectroscopy", Spectroscopy of Resonance and QCD, March 2016, ECT\*, Trento, Italy
18. "From theorists dreams to reality", New Directions in Subatomic Physics, March 2016, Adelaide, Australia.
19. "Hyperon Studies at JPAC", Physics with Neutral Kaon Beam at JLab Workshop, February 2016, JLab, Newport News, VA
20. "Hadron Reaction and Spectroscopy Studies at JPAC", XXXIX Symposium on Nuclear Physics, January 2016, Cocoyoc, Mexico
21. "Hadron Reaction and Spectroscopy Studies at JPAC", CLAS collaboration meeting, JLab, October, 2015.
22. "On a possible Interpretation of the pentaquark signal", CLAS collaboration meeting, JLab, October, 2015.
23. "Hadron Reaction and Spectroscopy Studies at JPAC", Light Cone 2015, Frascati September, 2015.
24. "Hadron Reaction and Spectroscopy Studies at JPAC", QCD-TNT 4, Ihabela, Sao Paulo, August 2015.
25. "Coulomb gauge Confinement and emergent phenomenology", Gauge Field Topology: From Lattice Simulations and Solvable Models to Experiment at the Simons Center for Geometry and Physics, Stony Brook August, 2015.
26. "Aspects of amplitude analysis: applications", LHCb workshop on multi-body decays of B and D mesons, Rio de Janeiro, July 2015.
27. "Joint Physics Analysis Center", Twelfth Conference on the Intersections of Particle and Nuclear Physics, Vail, May 2015.
28. "Joint Physics Analysis Center", APS meeting, Baltimore, April 2015.
29. "XYZ and triangle singularities", The International Workshop on Partial Wave Analysis for Hadron Spectroscopy, GWU, April 2015.
30. "XYZ's as evidence for new hadronic phenomena", workshop on Bound states in QCD and Beyond, St Goar, Germany, March 2015.
31. "XYZ and triangle singularities", HASPECT meeting, Genoa, Italy, December 2014.
32. "Summary talk" at the workshop Future Directions in Spectroscopy Analysis, JLab, Newport News, November, 2014.

33. "Unitarity diagrams on the lattice and the continuum", seminar, JLab, November, 2014.
34. "Open Questions in Hadron Spectroscopy and Dynamics", Conference on Science and Technology for FAIR in Europe, Worms, Germany, October 2014.
35. "Hadron Spectroscopy today and tomorrow", Dark Matter, Hadron Physics and Fusion Physics, Messina, Italy, September, 2014.
36. "Methods in Amplitude Analysis?", seminar JLab August, 2014.
37. "Opportunities in Challenges in Hadron Spectroscopy", EEF70, Coimbra, Portugal, August, 2014.
38. "Hadrons, QCD and Confinement" (extended) lecture at HUGS, June 2014.
39. "Physics Analysis Center", VIth Workshop on Hadron Physics in China and Opportunities in US, Lanzou, PRC, July, 2014.
40. "Veneziano model and applications", ECT\* workshop on Excited Baryons, Trento, June 2014.
41. "Veneziano model and application to Dalitz plot analysis", seminar, U. Complutense, Madrid, May 2014.
42. "Hadron Spectroscopy: past, present and future", Symposium on Nuclear Physics, Oaxtepec, /Mexico, January 2014.
43. "Charmonium decays and the Veneziano amplitude", seminar, U. Genoa, December, 2013 .
44. "Hadron Physics : Past, Present and Future", Physics Colloquium, December, 2013, GW University.
45. "Low Energy Hadron Phenomenology", MENU2013 Conference, Rome, September 2013.
46. "Complex Analysis" , three 2h lectures at School on Concepts of Modern Amplitude Analysis Techniques" , Flecken-Zechlin, September 2013.
47. "Partial Wave Analys: Strategies", PWA7: 7th Int. Wksp. on Pion-Nucleon PWA and Interpretation of Baryon Resonances, Camogli September, 2013.
48. "Theory and Phenomenology of hybrid mesons" ,QCD-TNT 3, ECT\* Trento, September, 2013.
49. "Amplitude Analysis" HASPEC Collaboration Meeting, ECT\*, Trento, July 2013.

50. "Regge analysis of the sigma meson" ATHOS2013', Munich, May 2013
51. "Supporting hadron spectroscopy", Workshop Mainz/Germany, February 2013.
52. "Supporting PWA", seminar, JLab, December, 2012.
53. "Hadron Spectroscopy", seminar, U. Genoa, Italy, November 2012.
54. "On the foundation of the gluon chain", Confinement X Conference, Munich, September, 2012.
55. "Hadron Spectroscopy: past, present, future" TNT Colloquium, NCSU, Raleigh NC, September, 2012
56. "Babar anomaly and pion form factors", POETC12 Inter. workshop, Bloomington IN, August 2012.
57. "Solitons, Instantons, Monopoles, and origins of confinement", KITPC, Beijing, July 2012.
58. "Application of pQCD in exclusive reactions: form factors", KITPC, Beijing, July 2012.
59. "Pseudoscalar form factors", seminar, U. Complutense, Madrid, July 2012.
60. Form factors of pseudoscalar mesons with VDM and fermion Regge exchanges, Light Cone 2012, Krakow, Poland July 2012.
61. "Hadron Physics Around the World", seminar, JLab, June, 2012.
62. "Resonances vs Backgrounds: role of meson-nucleon scattering", workshop on Physics with Secondary Hadron Beams in 21st Century, The George Washington University, Washington DC, April, 2012.
63. "Aspects of Regge Phenomenology", International Workshop on Partial Wave Analysis in Hadron Spectroscopy", IHEP, Beijing, March 2012.
64. "Examples of PWA", International Workshop on Partial Wave Analysis in Hadron Spectroscopy", IHEP, Beijing, March 2012.
65. "Pseudoscalar form factors", Workshop on Confinement Physics", JLab, March 2012.
66. "Pseudoscalar form factors, BaBar anomaly and related topics", XXXV Symposium on Nuclear Physics, Oaxtepec, /Mexico, January 2012.
67. "Exotic mesons: resonances vs backgrounds" COMPASS collaboration meeting, Munich Germany, October 2011.

68. "Pseudoscalar form factors, BaBar anomaly and related topics", International School of Nuclear Physics, Erice, Italy, September 2011.
69. "Schwinger-Dyson equations in models with disorder" ,QCD-TNT, Trento, September 2011.
70. "Regge Phenomenology", School on Amplitude Analysis in Modern Physics from hadron spectroscopy to CP phases, Bad Honnef, Germany, August 2011.
71. "Hadron Spectroscopy", Divisions of Particle Physics, Plenary Talk, APS, Brown U, August 2011.
72. Hadron structure from exclusive reactions (with photons), BNL, July 2011.
73. "P-wave re-scattering in  $J/\psi$  decays", 6th International Workshop on Pion-Nucleon Partial-Wave Analysis and the Interpretation of Baryon Resonances, Washington, DC, May 2011.
74. "Models of Hybrid Mesons", Hall-D collaboration meeting, Bloomington, IN, May 2011.
75. "Phenomenology overview of exotics and spectroscopy", International Workshop on Hadron Structure and Spectroscopy, Paris, April 2011.
76. "Hybrid Mesons", International Workshop on Physics of High Energy Density in Matter, Hirschegg, Austria January 2011.
77. "Inelastic effect in decay in  $J/\psi$  decays and related topics", Amplitude Analysis in Hadron Spectroscopy, ECT\*, Trento, January 2011.
78. "Nucleon Structure from Deeply Virtual Compton Scattering", XXXIII Symposium on Nuclear Physics, Oaxtepec, /Mexico, January 2010,
79. "Nucleon structure from DVCS" , Achievements and New Directions in Subatomic Physics, Adelaide, February 2010.
80. "QCD matter in the Coulomb gauge" , Workshop on Chiral Symmetry and Confinement in Cold, Dense Quark Matter, ECT\* Trento, July 2010.
81. "Progress in Coulomb gauge QCD", U.Tubingen, July 2010.
82. "Symmetries in particle and Hadron Physics", ELAF 2010, XL Latin American School of Physics Symmetries in Physics, Mexico, August 2010 ( (five lectures) ).
83. "Monopoles from the Coulomb gauge perspective" , Confinement 9 Conference Madrid, September 2010.

84. "Role of inelasticity in the  $\pi\pi$  P-wave", Topical QCD Conference, Carins, Australia September 2010.
85. "Amplitude analysis with the forward tagger at CLAS12" CLAS Collaboration meeting, JLab, Newport News, VA, November 2010 .
86. "Meson spectroscopy", CLAS12 collaboration meeting, Genoa, Italy, February 2009.
87. "Progress in Coulomb gauge", seminar, U. Tuebingen, Germany, March 2009.
88. "J=0 Pole in Compton scattering", DNP, Denver, CO, (invited) April 2009.
89. "On the Coulomb Vacuum Wave Function", International Workshop on QCD Greens Functions, Confinement, and Phenomenology, Trento, Italy, September 2009.
90. 6. "Recent Advances in Virtual Compton scattering", International Conference on Quark Nuclear Physics, Beijing, China, September 2009. (invited)
91. "Deeply Virtual Compton Scattering", JLab 12 Program at INT October, 2009.
92. "From gluons to hybrids: Adventures in the Coulomb Gauge", seminar, INP, Krakow, Poland December 2008.
93. "Analysis with theoretical constraints", Physics and methods in meson spectroscopy - Int. Joint Workshop CERN COMPASS-Jefferson Lab-GSI FAIR, October 2008.
94. "Coulomb gauge phenomenology ", Confinement 08, Mainz, September, 2008.
95. "From gluons to hybrids: Adventures in the Coulomb Gauge", T(R)opical QCD, Port Douglas, Australia, July, 2008.
96. "Gluon dynamics from the Coulomb gauge perspective" QCD challenges at LHC and harmonic physics", Cuernavaca, Mexico May, 2008.
97. "From gluons to glue-lumps and hybrids adventures in Coulomb gauge", Quarks and Hadrons in Strong QCD, 415th Wilhelm & Else Heraeus Seminar, March, 2008, St Goar, Germany.
98. "Examining evidence for exotic mesons", seminar U. Illinois, February, 2008.
99. "From gluons to hybrids: gluon dynamics from the Coulomb gauge perspective", QCD Down Under, Massey University Auckland January, 2008.
100. "Regge exchange contribution to DVCS" , U. Genoa, Italy, December 2007.
101. "From gluons to hybrids : Coulomb gauge perspective" seminar, U. Graz, Austria, December 2007.

102. "Photoproduction of  $f_0(980)$ ", CLAS collaboration meeting, November 2007.
103. "Exclusive DIS," 7th European Research Conference on "Electromagnetic Interactions with Nucleon and Nuclei," Greece, September 2007.
104. "Regge in exclusive electroproduction," Workshop on Exclusive Reactions at High Momentum Transfer, JLab, 2007.
105. "What do we learn about the quark structure of the nucleon from exclusive electroproduction," Light Cone QCD and Hadron Physics, Ohio, May 2007.
106. "Partial-Wave Analysis," Workshop on Central Production, BNL, May 2007.
107. "Partial-Wave Analysis in  $\gamma p \rightarrow \pi^+ \pi^- p$ ," CLAS Collaboration Meeting, February 2007.
108. "Role of Phenomenology and Model Building" , Rutgers U. , January 2006 NSAC Town Hall meeting.
109. "What do we learn about the quark structure of the nucleon from exclusive electroproduction," NTC seminar, January 2007.
110. "Exotica at Jlab", INP, Krakow, December 2006.
111. "What do we learn about the quark structure from exclusive electro-production", Seminar, INP Krakow, December 2006.
112. "Examining evidence for constituent gluons ", Seminar, U.Tuebingen, November 2006
113. "Study of Exotic mesons at JLab : Theoretical prospects", Workshop on the Physics of Nucleons and Nuclei, SURA, Washington DC, October 2006.
114. "The future search for exotic mesons at Jefferson Lab", Seminar, INFN Genoa, October, 2006.
115. "What do we learn about the quark structure from exclusive electro-production", Seminar, U.Complutense, Madrid, October 2006.
116. "Energy spectrum of the low-lying gluon excitations from the Coulomb gauge", International Conference on Confinement, Azores, Portugal (2006).
117. "Examining the evidence for constituent gluons and implication for the spectrum of hybrids", Quarkonium Working Group, BNL (2006).
118. "Examining the evidence for constituent gluons", International Workshop Mesons 2006, Krakow, Poland (2006).

119. "Exotics at JLab : present and future", International Conference on Quark Nuclear Physics, QNP2006, Madrid, Spain (2006).
120. "Examining the evidence for constituent gluons", JLab (2006).
121. "Amplitude Analysis", Mini Workshop on PWA, CMU, (2006).
122. "Quasi-particle vs the string picture of gluon excitations", XXIX Symposium on Nuclear Physics, Cocoyoc, Mexico (2006).
123. "Examining the evidence for constituent gluons", U. of Pittsburgh (2005).
124. "Partial wave analysis of  $\gamma p \rightarrow p\pi^+\pi^-$ ", CLAS collaboration meeting, JLab (2005).
125. "QCD : Where is the glue", Otterbein College, OH (2005).
126. "Examining the evidence for constituent gluons", NTC (2005).
127. "Examining the experimental evidence for pentaquarks", IST Lisbon (2005).
128. "Coulomb energy in QCD", Light Cone 2005, Cairns (2005).
129. "Evidence for Constituent Gluons", ECT, Trento (2005).
130. "Examining the experimental evidence for pentaquarks", DIS2005, Madison WI (2005).
131. "QCD and the role of gluonic excitations" , SURA Headquarters, DC (2005).
132. "Examining the experimental evidence for pentaquarks", ECT, Trento (2005).
133. "Basics of PWA", D0 B-Physics Workshop", IU (2004).
134. "Gluonic excitations and the GlueX experiment at Jlab", Meeting of the APS Topical Group on Hadronic Physics, FNAL (2004).
135. "Interpretation of exotic mesons", Quark Confinement and the Hadron Spectrum VI, Sardinia (2004).
136. "Round table on pentaquarks and exotics", Quark Confinement and the Hadron Spectrum VI, Sardinia (2004).
137. "Gluonic excitations and the Hall-D program at Jefferson Lab." Photonuclear reaction Gordon conference, Tilton NH (2004).
138. "Examination of the evidence for pentaquark signal" , Meson2004, Krakow, Poland (2004).

139. "QCD confinement, exotic mesons and the GlueX experiment", XVIII Meeting of the Division of Particles and Fields of the Mexican Physical Society", Mexico City, Mexico (2004).
140. "QCD in the Coulomb gauge" ,University of Maryland, (2004).
141. "QCD what is it about" SPS Meeting, IU (2004).
142. "Chromoelectric flux tubes" , NTC, IU (2004).
143. "Flux tubes in the Coulomb gauge", QCD down under, Adelaide, Australia (2004).
144. "Exotic Meson Spectroscopy and the GlueX/Hall D Experiment at Jlab" "XXVII Symposium on Nuclear Physics", Taxco, Mexico (2004).
145. "QCD" lectures given in the HUGS Summer school, JLaB, June 2001, (to appear in World Scientific, Singapore, 2003).
146. "Partial Wave Analysis", GlueX/Hall D Collaboration meeting, Jlab December 2003.
147. "Partial Wave Analysis", GlueX/Hall D Collaboration meeting, Glasgow, UK July 2003.
148. "Coulomb gauge QCD", Workshop on Lattice Hadron Physics, Carins, Australia, July 2003.
149. "Overview of the Hall D program at Jlab", Workshop on Lattice Hadron Physics, Carins, Australia, July 2003.
150. "Partial Wave Analysis", CLEO Workshop, Cornell University, June 2003.
151. "Partial Wave Analysis", Gluonic Excitations Workshop, JLab. Newport News, May 2003.
152. "Searching for Exotic Mesons in the E852 Data" Seminar, University of Pittsburgh, May 2003.
153. "Gluon propagator in the Coulomb Gauge", Workshop, ECT, Trento, March 2003.
154. "Searching for Exotic Mesons in the E852 Data" HEP seminar, Indiana University, February 2003.
155. "Finding an Exotic Meson" , NTC seminar, Indiana University, January 2003.
156. "Exotic Mesons", Structure of the Nucleon", Workshop, ECT, Trento, September, 2002.

157. "Exotic Mesons", XXV Workshop on Nuclear Physics, Brazil, September, 2002.
158. "QCD and the Coulomb gauge" Invited lectures at the IFT, U. of Sao Paulo, Brazil.
159. "Interpretation of light exotic mesons", Quarks and Nuclear Physics 2002 International Conference, Julich, June, 2002.
160. "Interactions in the  $\pi - \eta$  system", Workshop on Partial Wave Analysis, CMU, June 2002.
161. "Interpretation of light exotic mesons and implications for future exotics searches", Meson 2002, 7th International Workshop on Meson Production, Properties and Interaction, Krakow, May, 2002.
162. "Exotic meson spectroscopy : a new window on confinement", The Ohio State, May, 2002.
163. "On the physical interpretation of the light exotic meson", IUCF, Seminar, February, 2002.
164. "QCD at finite density", NTC, Seminar, IU, February, 2002
165. "Analysis of  $\eta\pi^0$  spectrum from E582 and implications for exotic meson searches", E852 Collaboration meeting, FSU, January, 2002.
166. "QCD, confinement, gluons and new forms of matter", FSU, Seminar, January, 2002.
167. "Coulomb gauge QCD, gluons and exotics: a new window on confinement", NYU, November, 2001.
168. "Theory issues", Hall D Collaboration meeting, IU, November 2001.
169. "Exotic meson spectroscopy, a new window on confinement", IV Latin American Symposium on Nuclear Physics, Mexico, September 2001.
170. "Exotic mesons studies at Hall D at JLAB", Eurodaphne Workshop on Nonperturbative Methods in Chiral Theories, Valencia, Spain, June, 2001.
171. "QCD in the Coulomb Gauge and Exotic Meson Phenomenology", Seminar, INT U.of Washington, May, 2001.
172. "Confinement in the Coulomb Gauge", Workshop on Lepton Scattering, Hadrons and QCD, Adelaide, Australia, March, 2001.
173. "Modern Meson Spectroscopy, Studies of Soft Gluon Dynamics", Seminar, CMU, February, 2001.

174. "Modern Meson Spectroscopy, Studies of Soft Gluon Dynamics", Seminar, FSU, January, 2001.
175. "Chiral extrapolation, renormalization and the quark model", Seminar, NC, IU, November, 2000
176. Scientific Secretary for the Discussion on Models of the Quark Structure of Matter, Workshop on Key Issues in Hadron Physics, November 5-10, 2000, Duck, North Carolina.
177. "Physics of the Hall D", CMU-IT Workshop, CMU, September 14-16, 2000.
178. "Nonperturbative renormalization of the gluon sector in Coulomb gauge", Workshop on Perspectives in Continuum Strong QCD, Argonne, August 14-18, 2000.
179. "PWA for Hall D", Hall D Collab. Meeting, JLab, August 4-5, 2000
180. "Studies of Coulomb gauge QCD". 7th International Conference on Intersections of Particle and Nuclear Physics, Quebec, Canada, May 22-28, 2000.
181. "Physics of the Hall D", Meson 2000, Krakow, Poland, May 19-22, 2000
182. "Physics of the Hall D", Workshop on Hadronic Physics with Photon Beams", Adelaide, Australia, February. 16-18, 2000
183. "Unitary, relativistic description of final state interactions", Seminar, Argonne, December, 1999.
184. "PWA and Hybrid filter", Presentation of the Hall D Review, JLab, December, 1999.
185. "Gluons in Coulomb gauge QCD", Seminar, NTC, IU, November, 1999.
186. "Physics of the Hall D", Seminar, IST, Lisbon, Portugal, September, 1999.
187. "Hybrids and exotic mesons", Dynamics of Simple Systems, Gordon Research Conference, Salve Regina U., July, 1999.
188. "Matching soft and hard contributions in form factors", Workshop on Exclusive Processes", JLab, May 1999.
189. "Physics of the Hall D", Seminar, U. of Illinois, April, 1999.
190. "Summary of the theory session", Workshop on a New Facility for High Energy Photoproduction, RPI, Troy/NY, March 1999.
191. "Photoproduction of  $\rho\pi$  below 2 GeV", Workshop on a New Facility for High Energy Photoproduction, RPI, Troy/NY, March 1999.

192. "New Meson Facility at TJNAF", Seminar, Institute for Nuclear Physics, Karakow, Poland, January 1999.
193. "CPT tests at TJNAF", Meeting on CPT and Lorentz Symmetry, Indiana University, Bloomington, November 1998.
194. "Physics with 8+ GeV photons", Workshop on Studies of hadron structure with photons and electrons", FIU, Miami, November 1998.
195. "Staging the physics goals for the 8+ GeV photon facility" FSU/Jlab Workshop on Physics with 8+ GeV photons, FSU, Tallahassee, October 1998.
196. "Threshold charm photoproduction", JLab Users Workshop, Newport News, June, 1998.
197. "Soft Glue", Confinement III Conference, JLab, Newport News, VA, June, 1998.
198. "Exotic mesons and structure of soft glue", Meson'98 Conference, Krakow, Poland, May, 1998.
199. "Modeling soft QCD", Ohio University, Athens, OH, April 1998.
200. "Modeling soft QCD", High Energy Seminar, Indiana University, April, 1998.
201. "What are the relevant degrees of freedom", Workshop on Soft QCD, APS Meeting, Columbus OH, April 1998.
202. "Strongly interacting exotic particles: what they are and where to find them", Indiana University, April, 1998.
203. "Physics goals with the 8+ GeV photon facility" Nuclear Theory Center, Indiana University, March, 1998.
204. "Heavy hybrids", Workshop on Future directions in nuclear physics, Adelaide, March, 1998
205. "Final state interactions", CMU/JLab Workshop on Physics with 8+ GeV photons, CMU, Pittsburgh, March 1998.
206. "Physics goals with the 8+ GeV photon facility", CMU/JLab Workshop on Physics with 8+ GeV photons, CMU, Pittsburgh, March 1998.
207. "Adiabatic Hybrids", NCSU/JLab Workshop on Hybrids and Photoproduction Physics, NCSU, Raleigh, NC, November 1997.
208. "On the Dirac structure of confinement of quarks", Theoretical Symposium, Athens, GA, September, 1997.

209. "Dirac structure of confinement and nonperturbative glue", Int'l. Conference on Light-Cone QCD and Nonperturbative Hadronic Physics, Lutsen, MI, August, 1997.
210. "Dirac structure of confinement and nonperturbative glue", 2nd Int'l. Symposium on Symmetries in Subatomic Physics", Seattle, WA, June, 1997.
211. "From partons to constituent quarks: building the bridge between QCD and hadron phenomenology.", Seminar, Instituto Superior Tecnico, Lisbon, Portugal, June, 1997.
212. "Relativistic many-body approach to hadron structure", Int'l. Conference on perspectives in hadronic physics, Trieste, Italy, May, 1997.
213. "From partons to constituent quarks: building the bridge between QCD and hadron phenomenology.", Physics Colloquium, Florida International University, Miami, FL, March, 1997.
214. "From partons to constituent quarks: building the bridge between QCD and hadron phenomenology.", Physics Colloquium, Indiana University, Bloomington, IN, March, 1997.
215. "From partons to constituent quarks: building the bridge between QCD and hadron phenomenology.", Physics Colloquium, North Carolina Central University, Durham, NC, March, 1997.
216. "From partons to constituent quarks: building the bridge between QCD and hadron phenomenology.", Physics Colloquium, Louisiana Tech. University, Ruston, LA, February, 1997.
217. "On the Dirac structure of confinement", Seminar, Institute for Nuclear for Nuclear Physics, Krakow, Poland, November, 1996.
218. "On the Dirac structure of confinement", Theory Group Seminar, TJNAF, September, 1996.
219. "The Dynamical Quark Model", Workshop on Nonperturbative QCD, Argonne National Laboratory, June, 1996.
220. "Many Body Hamiltonian Approach to QCD -Applications", XIV Int'l. Conference on Particles and Nuclei, Williamsburg, May, 1996.
221. "Many Body Hamiltonian Approach to QCD -Theory", XIV Int'l. Conference on Particles and Nuclei, Williamsburg, May, 1996.
222. "Quarks, partons, tubes and bags: quest for the right degrees of freedom", Physics Colloquium, Old Dominion University, April, 1996.

- 223. "The Dynamical Quark Model", Seminar, CEBAF, April, 1996.
- 224. "Relativistic, many body approach to hadron structure", Nuclear Theory Seminar, Duke University, Durham, NC, April, 1996.
- 225. "Relativistic, many body approach to hadron structure", Seminar, Nuclear Theory Center, Indiana University, Bloomington, IN, March , 1996.
- 226. "Relativistic, many body approach to hadron structure", Nuclear Theory Seminar, Ohio State University, January, 1996.
- 227. "The Dynamical Quark Model" , SCRI Seminar, Florida State University, Tallahassee, FL, 1995.
- 228. "Heavy meson form factors", Institute for Theoretical Physics Seminar, University of Adelaide, Australia, September, 1995.
- 229. "Many body approach to quark model and hadron structure", Institute for Theoretical Physics Seminar, University of Adelaide, Australia, August, 1995.
- 230. "Heavy to light meson transitions and heavy meson wave function", 5th Int'l. Workshop on Light-Cone QCD, Telluride, CO, August, 1995.
- 231. "Physics education in Poland", Seminar, North Carolina State University, Raleigh, NC, July, 1995.
- 232. "Many body approach to quark model and hadron structure", Theory Group Seminar, CEBAF, April, 1995.
- 233. "Relativistic effects in hadron structure", Hall B CLAS Collab. Meeting, CEBAF, March, 1995.
- 234. "Relativistic effects in hadron structure", Nuclear Theory Seminar, Ohio State University, January, 1995.
- 235. "Relativistic description of hadron structure", Fall Meeting of the Division of Nuclear Physics, Williamsburg, VA, October, 1994.
- 236. "On the constituent quark structure", Institute for Nuclear Physics Seminar, Krakow, Poland, August 1994.
- 237. "The constituent quark structure", Int'l. Symposium on Theory of Hadrons and Light-front QCD, Zakopane, Poland, August, 1994.
- 238. "On the constituent quark structure", 14th Int'l. Conference on Few Body Problems in Physics, Williamsburg, May, 1994.

- 239. "Structure of the constituent quark", Nuclear Theory Seminar, University of Maryland, College Park, MD, April 1994.
- 240. "Effective Degrees of Freedom in Hadronic Structure", XVII Symposium on Nuclear Physics, Oaxtepec, Mexico January, 1994.
- 241. "Heavy meson form factors and the structure of a constituent quark", Cornelius Lanczos Int'l. Centenary Conference, Raleigh, NC, December, 1993.
- 242. "Effective degrees of freedom in hadron structure", Nuclear Theory Seminar, Duke University, Durham, May, 1993.
- 243. "Covariant pion wave function and form factors at intermediate momentum transfers", Theory Group Seminar, CEBAF, April, 1993.
- 244. "Relativistic effects in hadron structure", Seminar, North Carolina State University, Raleigh, NC, March, 1993.
- 245. "Pion form factors at intermediate momentum transfer", Workshop on Non-perturbative QCD and QCD modeling, Argonne National Laboratory, July, 1992.
- 246. "Covariant model of a fermion-antifermion bound state with harmonic confinement", Int'l. Conference on the Structure of Baryons and Related Mesons, Baryons'92, Yale University, June, 1992.
- 247. "Covariant bound state models of meson structure", Triangle Nuclear Theory Seminar, North Carolina State University, Raleigh, NC, April, 1992.
- 248. "Light-cone quantization" Series of 3 lectures, Florida State University, Tallahassee, FL, spring 1992.
- 249. "Light-cone formalism and applications in hadron physics", Seminar, Bartol Research Institute, Newark, DE, October, 1991.
- 250. "Relativistic quark models", Discussion leader, 5-th program on N\* and Nucleon Structure, Institute for Nuclear Theory, University of Washington, Seattle, WA, July 1991.
- 251. "Hamiltonian formulation of a simple covariant harmonic oscillator for bosons and fermions", Symmetries in Physics, Int'l. Symposium in Honor of M.Moshinsky, Co-coyoc, Mexico, June, 1991.
- 252. "Study of exclusive nonleptonic decays of heavy mesons", Institute of Theoretical Physics Seminar, University of Warsaw, Warsaw, Poland, November, 1990.

253. "Study of exclusive nonleptonic decays of heavy mesons", SCRI Seminar, Florida State University, Tallahassee, FL, October, 1990.
254. "Perturbative QCD effects in heavy meson decays", Int'l. Conference on Particles and Nuclei, Cambridge, MA, June, 1990.
255. "Exclusive nonleptonic decays of B mesons", Nuclear Physics Seminar, University of Washington, Seattle, WA, November, 1989.
256. "Light-cone quark model for nucleon", Nuclear Physics Seminar, University of Washington, Seattle, WA, March, 1989.
257. "Light-cone quark model of baryons", Institute of Physics Seminar, National Autonomous University of Mexico, Mexico, August, 1987.
258. "Relativistic model of baryon valence-quark structure", Int'l. Conference on Physics at Future Accelerators, Kazimierz, Poland, May 1987.