# **CURRICULUM VITAE**

James A. Dunne Department of Physics and Astronomy Mississippi State University P.O. 5453 Mississippi State, MS 39762

## **EDUCATION**:

• Ph.D. Degree	e: The American University, Washington, D.C. 1995
	"Measurement of the Spin Structure Function of the Neutron $g_1^n$ from
	Deep Inelastic Scattering of Polarized Electrons from Polarized Neutrons
	in <sup>3</sup> He" The E-142 Collaboration.
• B.S. Degree:	The American University, Washington, D.C. 1987, physics.

## **PROFESSIONAL EXPERIENCE:**

• 2	2018 - Present	Interim Associate Vice President for Academic Affairs, Office of the
		Provost and Executive Vice President, Mississippi State University.
• 2	2017 - 2018	Director, Center for Teaching and Learning, Mississippi State
		University.
• 2	2016 - 2017	Interim Director, Center for Teaching and Learning, Mississippi State
		University.
• 2	2009 - Present	Full Professor, Department of Physics and Astronomy, Mississippi
		State University.
• 2	2006 - 2007	Thomas Jefferson National Accelerator Facility Sabbatical Fellow.
• 2	2003 - 2009	Associate Professor, Department of Physics and Astronomy,
		Mississippi State University.
• 1	998 - 2003	Assistant Professor, Department of Physics and Astronomy,
		Mississippi State University. Bridged appointment with the Thomas
		Jefferson National Accelerator Facility.
• 1	995 - 1998	Postdoctoral Research Associate , The Thomas Jefferson National
		Accelerator Facility.
• 1	990 - 1992	Substitute Teacher, Montgomery County Public School System, MD.
• 1	988 - 1992	Varsity Wrestling Head Coach, Springbrook High School, Silver
		Spring, MD.
• 1	.986	Technician, Sachs Freeman, Naval Research Laboratory.

## **COURSES TAUGHT:**

- True Maroon-FYE: First year experience course for undecided freshman providing them with strategies to be successful in college.
- Physics I PH2213: Introductory physics with calculus, primarily covering Newtonian mechanics, undergraduate.
- Physics II PH2223: Introductory physics with calculus, primarily covering classical electricity and magnetism, undergraduate.
- Introductory physics for honors students and physics majors. • Honors Physics I & II: • Modern Physics Special relativity, quantum physics, atomic, nuclear, and solid state physics, undergraduate.

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Intermediate level electricity and magnetism, primarily Fields I – PH4323/6323: covering electrostatics, undergraduate and graduate.

Intermediate level electricity and magnetism, primarily Fields II – PH4333/6333: covering electrodynamics, undergraduate and graduate.

Introductory nuclear and particle physics, undergraduate and Physics – PH4613/6613: graduate.

- Intermediate level classical mechanics covering kinematics Mechanics-PH4213/6213 and Newtonian dynamics, undergraduate and graduate.
- Intermediate level classical mechanics covering Lagrangian Mechanics-PH4223/6223 and Hamiltonian dynamics, undergraduate and graduate.
- Physics for Teachers PH4033/6033:

Physical science and physics for in-service and pre-service middle school science teachers.

## **RESEARCH ACTIVITY:**

- Refereed Publications:
- Invited Talks:

• Electromagnetic

• Electromagnetic

• Intermediate

• Intermediate

• Nuclear and Particle

- Postdoctoral Associates Supervised:
- Graduate Students Supervised:

Jinsok Cha (2002 - 2004)

Hem Datt Bhatt (2015 - present), Luwani Ndukum (2008 - 2015) Ph.D. awarded in August, 2015, Adesh Subedi (2009 - 2014) Ph.D. awarded in December, 2014, Craig Carrigee (2006 - 2008) MS degree in December, 2007, Parikshit Junnarkar (2004 -2006) MS degree in December, 2006.

Undergraduate Students Supervised: Katlyn Grimes (2018 - present), Jacob Easley (2016 - 2018), Ben Mackin (2015 - 2017), Christine Mazzola (2015 - 2016), (Dane Peagler (2012 - 2013), Sean Duke (2010 - 2012), Garrett Dorman (2009 - 2010), Michael Frassetto (2009 - 2010), Daniel Brown (2007 - 2010), Chris Yancy (2006), David Pigg (2005 - 2006), Wesley Baker (2001 - 2004), Kurt Spurlock (1999 - 2001). Carson Lawrence (2012), Khadija Ransom (2005 - 2006)

#### FUNDED GRANT PROPOSALS:

- Department of Energy, "Precision Measurements at Medium Energy", \$1,218,000 for three years starting September 1, 2016. Co-PI with Dr. Dutta and Dr. El-Fassi from the Physics Department. We joined our DOE grants to form this group grant, since we all primarily work in Medium Energy Nuclear Physics.
- Department of Energy, "Precision Measurements at Medium Energy", \$800,000 for three years starting September 1, 2013. Co-PI with Dr. Dutta from the Physics Department. We joined our DOE grants to form this group grant, since we both work in Medium Energy Nuclear Physics.
- Department of Energy, "Precision Measurements at Medium Energy", \$833,000 for three years starting September 1, 2010. Co-PI with Dr. Dutta from the Physics Department. We joined our DOE grants to form this group grant, since we both work in Medium Energy Nuclear Physics.
- MS Department of Education, "Teacher Academy for the Natural Sciences, TANS," \$1,464,189 for three years, started June 1, 2010. PI and director with two co-PI's and four other colleagues from College of Ed. and College of Arts & Sciences. Program will train sixty middle school science teachers in physics, chemistry, and earth science over three years from June 1, 2010 to May 31, 2013.
- Mississippi Institutions of Higher Learning, "Teacher Training in Physical Science TTIPS09", NCLB: Teacher Quality Improvement Grant, \$84,986 from February, 2009 to April, 2010. Co-PI with Dr. Anastasia Elder from Department of Ed. Psych.
- Department of Education, "Creative Research-based Science Teachers for a Competitive Tomorrow", \$1,241,433 for five years, started October 2008. Co-PI with five other colleagues from College of Ed. and College of Arts & Sciences.
- Department of Energy, "Intermediate Energy Nuclear Physics Program", \$342,000 for three years starting August 2007

- Mississippi Institutions of Higher Learning, "Teacher Training in Physical Science TTIPS08", NCLB: Teacher Quality Improvement Grant, \$82,000 from February, 2008 to April, 2009. Co-PI with Dr. Anastasia Elder from Department of Ed. Psych.
- Mississippi Institutions of Higher Learning, "Teacher Training in Physical Science TTIPS07", NCLB: Teacher Quality Improvement Grant, \$94,471 from February, 2007 to May, 2008. Co-PI with Dr. Anastasia Elder from Department of Ed. Psych.
- Department of Energy, "Intermediate Energy Nuclear Physics Program", \$60,000 for one year starting August 2006.
- Department of Energy, "Intermediate Energy Nuclear Physics Program", \$105,000 for two years starting August 2004.
- Mississippi State University, "Classroom Response System to Enhance Student-Teacher Interaction", Shillig Special Teacher Projects, \$3,000 in 2004.
- Mississippi State University, "Nucleon Structure at the Thomas Jefferson National Accelerator Facility", Research Initiation Program, \$10,000 in 1999.

## NUCLEAR PHYSICS EXPERIMENT PROPOSALS (CO-SPOKESPERSON):

- Thomas Jefferson National Accelerator Facility, "The A-dependence of  $J/\psi$  photoproduction near threshold". Conditionally approved by the Jefferson Lab Physics Advisory Committee in PAC32 during summer of 2007.
- Thomas Jefferson National Accelerator Facility, "Sub-threshold J/ψ Photoproduction." Approved for seven days by the Jefferson Lab Physics Advisory Committee in PAC23 during January, 2003.

## **RECENT HONORS AND PROFESSIONAL MEMBERSHIPS:**

- Nominated to the Higher Education Appreciation Day Working for Academic Excellence (HEADWAE) Award, 2019.
- Certificate of Appreciation from The Mississippi State Chapter of the National Society of Black Engineers, 2016.
- Nominated to the U.S. Professors of the Year Awards Program, 2013.
- 2013 Recipient of the Higher Education Appreciation Day Working for Academic Excellence (HEADWAE) Award (Mississippi Association of Colleges and Universities honor an outstanding faculty member from each associated institution).
- 2012 Recipient of the John Grisham Master Teacher Award (MSU's top teaching award).
- 2010 Mississippi State University Alumni Association Excellence in Undergraduate Teaching Award.

- 2010 Recipient of MSU State Pride Award.
- 2008 awarded College of Arts & Science Researcher of the Month Award (first recipient).
- 2007 awarded College of Arts & Science Dean's Eminent Scholar Award.
- 2006 elected to Phi Kappa Phi honor society.
- 2006 Blake Lilly Prize from National Society of Physics Students to Mississippi SPS. (I was faculty advisor).
- 2006 Marsh W. White Award from National Society of Physics Students to Mississippi SPS.(I was faculty advisor).
- 2002 elected to Sigma Xi research society.
- 2001 MSU/IMAGE (Increasing Minority Access to Graduate Education) Faculty Appreciation Award
- Member of the American Physical Society and American Association of Physics Teachers.

### SERVICE:

#### Professional

- Reviewer for Department of Energy Nuclear Physics Grant Proposals.
- Reviewer for new university physics textbook, "Physics for Scientists and Engineers" by Katz.
- Appointed to the American Association of Physics Teachers (AAPT) Committee on Physics in Pre-High School Education, term from 2008 2011.
- Reviewer for National Science Foundation Grant Proposals.
- Reviewer for European Physical Journal A
- In Reader Pool for Educational Testing Services AP Physics Examination.
- Reviewer for new university physics textbook, "Physics for Engineers and Scientists" by Ohanian and Markert.
- Served on Jefferson Lab PRIMEX experiment readiness review committee.
- Reviewer for Florida Space Grant research awards in 2002.

#### University

- Serving as a reviewer for Institutional Effectiveness Committee.
- Serving on Associates Deans Council
- Serving on Instructional Technology Advisory Committee
- Serving on Teaching Evaluation Committee.
- Serving on the Honors Advisory Committee.

- Servied on the University Instructional Improvement Committee (2014 2018).
- Served on the Athletic Council (2015 2018).
- Served on Internal Review Committee for the five-year program review for the Department of Chemical Engineering (2015-2106).
- Served as a Faculty Associate for the Center of Teaching and Learning (2014 2016) (Director of CTL from 2016 - 2018).
- Served on a faculty panel to discuss teaching a part of a campus-wide meeting on "The Scholarship and Evaluation of Teaching." Sept. 4, 2014.
- Served on a faculty panel with the University Press of Mississippi for a roundtable discussion on the impacts of electronic scholarship, Oct. 27, 2014.
- Served on the Robert Holland Faculty Senate (2008-2014).
- Served on the Community Engagement Committee (2011-2013).
- Served on committee to select Graduate Student Association Zacharias Teaching Assistants of the Year (2013)
- Served on Institutional Effectiveness committee for MSU's Southern Association of Colleges and Schools (SACS) accreditation self study.
- Served as a mentor for MSU football team for two years.

#### **College of Art & Sciences**

- Serving on Arts & Sciences Scholarships Committee (2017 Present).
- Served as reviewer for the Dean's Eminent Scholar and the Oldham Mentor Awards (2008).
- Served on Promotion and Tenure committee.
- Served on Faculty Senate.

#### **Department of Physics**

- Serving as chair of Outreach committee.
- Serving on the undergraduate recruitment committee.
- Serving on Faculty Development / Peer Teaching Review committee.
- Served of Promotion and Tenure committee (chair twice).
- Faculty advisor for the Society of Physics Students.
- Chaired library resources committee.
- Chaired electricity and magnetism portion of new graduate student placement exams and Ph.D. qualifying exams.

- Serving on mechanics portion of new graduate student placement exams and Ph.D. qualifying exams.
- Member of search committee which hired MSU/Jefferson Lab Bridged Assistant Professor in 2014.
- Member of search committee to hire Instructor/Instructional Support Coordinator in 2001 & 2013.

#### **Refereed Publications:**

- 1. Androic, D., *et al.*, Precision Measurement of the Weak Charge of the Proton, Nature **557** no.7704, 207-211, 2018.
- 2. Maxwell, J.D., *et al.*, Design and performance of the spin asymmetries on the nucleon experiment, NIM **A885**, 145-159, 2018.
- 3. Tvaskis, V, *et al.*, Measurements of the Separated Longitudinal Structure Function F\_L from Hydrogen and Deuterium Targets at Low Q^2, Phys. Rev. **C97**, no. 4, 045204, 2018.
- Clary, R., Elder, A., Dunne, J., Saebo, S., Beard, D., Wax, C., Winter, J., & Tucker, D. (In Press). Beyond the professional development academy: Teachers' retention of discipline-specific scientific content knowledge throughout a 3-Year mathematics and science partnership. School Science and Mathematics.
- Clary, R.M., Dunne, J. Elder, A., Saebo, S., Beard, D., Wax, C., Winter, J., and Tucker, D. Optimizing online content instruction for effective hybrid teacher professional development programs. Journal of Science Teacher Education. Vol. 28, Iss. 6, 2017.
- Clary, R., Elder, A., Dunne, J., Tucker, D., Beard, D. Saebo, S., Wax, C., & Winter, J. (2015). Professional development with innovative co-teaching. In. S. Latourelle (ed.) Innovations in College Science Teaching. Society for College Science Teachers (Chapter 3, pp. 103 – 114).
- 7. Allison, T., et al., The Q<sub>weak</sub> Experimental Apparatus. NIM A781, 105-133, 2015.
- 8. Huber, G.M., *et al.*, Separated Response Functions in Exclusive, Forward  $\pi^{\pm}$  Electroproduction on Deuterium. Phys. Rev. **C91**, 015202, 2015.
- 9. Huber, G.M., *et al.*, Separated Response Function Ratios in Exclusive, Forward  $\pi^{\pm}$  Electroproduction. Phys. Rev. Lett. **112**, 182501, 2014.

- Androic, D., *et al.*, First Determination of the Weak charge of the Proton. Phys. Rev. Lett. 111, 141803, 2013.
- Asaturyan, R., *et al.*, Semi-Inclusive charged-Pion Electroproduction off Protons and Deuterons: Cross Sections, Ratios and Access to the Quark-Parton Model at Low Energies. Phys. Rev. C85, 015202, 2012.
- 12. Slifer, K., *et al.*, Probing Quark-gluon Interactions with Transverse Polarized Scattering. Phys. Rev. Lett. **105**, 101601, 2010.
- Seely, J., *et al.*, New measurements of the EMC effect in very light nuclei. Phys. Rev. Lett. 103, 202301, 2009.
- 14. Malace, S.P., et at., Applications of Quark-Hadron Duality in F2 Structure Function. Phys. Rev. C80, 035207, 2009.
- 15. Villano, A.N., et al., Neutral Pion Electroproduction in the Resonance Region at High  $Q^2$ . Phys. Rev. **C80**, 035203, 2009.
- Dalton, M.M., *et al.*, Electroproduction of η Mesons in the S11(1535) Resonance Region at High Momentum Transfer. Phys. Lett. C80, 015205, 2009.
- Bosted, P., *et al.*, Search for Sub-threshold Photoproduction of J/ψ Mesons. Phys. Rev. C79:015209, 2009.
- 18. Blok, H.P., *et al.*, Charged Pion Form Factor between  $Q^2 = 0.60$  and 2.45 GeV<sup>2</sup>. I. Measurements of the Cross Section for the 1H(e,e' $\pi^+$ )n Reaction. Phys. Rev. **C78**, 045202 2008.
- Huber, G.M., *et al.*, Charged Pion Form Factor between Q<sup>2</sup> = 0.60 and 2.45 GeV<sup>2</sup>. II. Determination of, and results for, the Pion Form Factor. Phys. Rev. C78, 045203, 2008.
- 20. Mkrtchyan, H., *et al.*, Transverse momentum dependence of semi-inclusive pion production. Phys. Lett. **B665**:20-25, 2008.
- 21. Wesselmann, F.R., *et al.*, Proton spin structure in the resonance region. Phys. Rev. Lett **98**:132003, 2007.
- 22. Tadevosyan, V., *et al.*, Determination of the pion charge form factor for  $Q^2 = 0.60-1.60$  (GeV/*c*)<sup>2</sup>. Phys. Rev. **C75**:055205, 2007.
- 23. Tvaskis, V., *et al.*, Longitudinal-Transverse Separations of Structure Functions at Low  $Q^2$  for Hydrogen and Deuterium. Phys. Rev. Lett **98**:142301, 2007.

- 24. Navasardyan, T., *et al.*, The Onset of Quark-Hadron Duality in Pion Electroproduction. Phys. Rev. Lett. **98**:022001, 2007.
- 25. Jones, M.K., *et al.*, Proton  $G_E/G_M$  from beam-target asymmetry. Phys. Rev. C74:035201, 2006.
- Armstrong, D.S., *et al.*, Qweak: A Precision measurement of the proton's weak charge. Eur. Phys. J. A 24 S02:155-158, 2005.
- 27. Ambrozewicz, P., *et al.*, Near Threshold Electroproduction of the Omega Meson at  $Q^2 = 0.5 (\text{GeV}/c)^2$ . Phys. Rev. C70:035203. 2004.
- 28. Christy, M.E., *et al.*, Measurements of Electron Proton Elastic Cross-Sections for  $0.4 < Q^2$ < 5.5 (GeV/*c*)<sup>2</sup>. Phys. Rev. **C70**:015206, 2004.
- 29. Warren, G. *et al.*, Measurement of the Electric Form-Factor of the Neutron at  $Q^2 = 0.5$   $(\text{GeV}/c)^2$  and 1.0  $(\text{GeV}/c)^2$ . Phys. Rev. Lett. **92**:042301, 2004.
- Dutta, D. *et al.*, A Study of the Quasielastic (e,e',p) Reaction on C-12, Fe-56, and Au-97. Phys. Rev. C68:064603, 2003.
- 31. Mohring, R.M., *et al.*, Separation of the Longitudinal and Transverse Cross-Sections in the  $p(e,e',K^+)\Lambda$  and  $p(e,e',K^+)\Sigma_0$  Reactions. Phys. Rev. C67:055205, 2003.
- 32. Garrow, K., *et al.*, Nuclear Transparency from Quisielastic A(e,e¢,p) Reactions up  $Q^2 = 8.1$  (GeV/c)<sup>2</sup>. Phys. Rev. C66:044613, 2002.
- 33. Gaskell, D., *et al.*, Measurement of Longitudinal and Transverse Cross-Sections in the <sup>3</sup>He  $(e,e',\pi^+)^3$ H Reaction at W = 1.6 GeV. Phys. Rev. C65:011001, 2002.
- 34. Gaskell, D., *et al.*, Longitudinal Electroproduction of Charged Pions from <sup>1</sup>H, <sup>2</sup>H, and <sup>3</sup>He. Phys. Rev. Lett. **87**:202301, 2001.
- 35. Schulte, E.C., *et al.*, Measurement of the High Energy Two-Body Photodisintegration Differential Cross Section. Phys. Rev. Lett. **87**:102302, 2001.
- Arrington, J., *et al.*, *x* and ξ–scaling of the Nuclear Structure Function at Large *x*. Phys. Rev. C64:014602, 2001.
- Volmer, J., *et al.*, Measurement of the Charged Pion Electromagnetic Form-Factor. Phys. Rev. Lett. 86:1713-1716, 2001.
- Niculescu, I., *et al.*, Experimental Verification of Quark-Hadron Duality. Phys. Rev. Lett. 85: 1182-1185, 2000.

- Niculescu, I., *et al.*, Evidence for Valence-Like Quark-Hadron Duality. Phys. Rev. Lett. 85: 1186-1189, 2000.
- 40. Dutta, D., *et al.*, Separated Spectral Functions for the Quasifree C-12 (E,E-Prime,P) Reaction. Phys. Rev. C61:061602, 2000.
- 41. Abbott, D., *et al.*, Phenomenology of the Deuteron Electromagnetic Form-Factors. Eur. Phys. J. A7: 421-427: 2000.
- 42. Abbott, D., *et al.*, Measurements of Tensor Polarization in Elastic Electron Deuteron Scattering at Large Momentum Transfer. Phys. Rev. Lett. **84**: 5053-5057, 2000.
- 43. Arrington, J., *et al.*, Inclusive Electron Nucleus Scattering at Large Momentum Transfer. Phys. Rev. Lett. **82**: 2056-2059, 1999.
- 44. Abbott, D., *et al.*, T20 collaboration. A Precise Measurement of the Deuteron Elastic Structure Function  $A(Q^2)$ . Phys. Rev. Lett. **82**: 1379-1382, 1999.
- 45. Abe, K., *et al.*, E143 collaboration. Measurements of  $R=\sigma_L/\sigma_T$  for 0.03 < x < 0.1 and Fit to World Data. Phys. Lett. **B452**: 194-200, 1999.
- 46. Meekins, D.G., *et al.*, E89-012 collaboration, Coherent Pi-0 Photoproduction on the Deuteron up to 4-GeV. Phys. Rev. **C60**:052201, 1999.
- Armstrong, C.S., *et al.*, E94-014 collaboration. Electroproduction of the S(11)(1535) Resonance at High Momentum Transfer. Phys. Rev. D60:052004, 1999.
- 48. Frolov, V.V., *et al.*, E94-014 collaboration. Electroproduction of the Delta (1232) Resonance at High Momentum Transfer. Phys. Rev. Lett. **82**: 45-48, 1999.
- 49. Bochna, C., *et al.*, E89-012 collaboration, Measurements of Deuteron Photodisintegration up to 4.0-GeV. Phys. Rev. Lett. **81**: 4576-4579, 1998.
- Niculescu, G., *et al.*, E93-018 collaboration. Longitudinal and Transverse Cross Sections in the <sup>1</sup>H(e,e'K<sup>+</sup>)Λ Reaction. Phys. Rev. Lett. 81: 1805-1808, 1998.
- 51. Abe, K., *et al.*, E143 collaboration. Measurements of the proton and deuteron spin structure functions  $g_1$  and  $g_2$ . Phys. Rev. **D58**:112003, 1998.
- 52. Abbott, D., *et al.*, E91-013 collaboration. Quasifree (e,e'p) Reactions and Proton Propagation in Nuclei. Phys.Rev.Lett .**80**:5072-5076,1998.
- 53. Abe, K., *et al.*, E143 collaboration. Measurements of the proton and deuteron spin structure function in the resonance region. Phys. Rev. Lett. **78**: 815-819, 1997.

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- Anthony, *et al.*, E142 collaboration. Deep inelastic scattering of polarized electrons by polarized <sup>3</sup>He and the study of the neutron spin structure. Phys. Rev. **D54**: 6620-6650, 1996.
- 55. Abe, K., *et al.*, E143 collaboration. Measurements of the proton spin structure function  $g_2$  and asymmetry  $A_2$ , Phys. Rev. Lett. **76**:587-591, 1996.
- 56. Tao, L.H., *et al.*, Precision Measurement of  $R=\sigma_L/\sigma_T$  on Hydrogen, Deuterium, and Beryllium Targets in Deep Inelastic Electron Scattering. Z. Phys, **C70**: 387-390. 1996.
- 57. Abe, K., *et al.*, E143 collaboration. Measurements of the  $Q^2$  dependence of the proton and deuteron spin structure functions  $g_1^p$  and  $g_1^d$ . Phys. Lett. **B364**: 61-68, 1995.
- Abe, K., *et al.*, E143 collaboration. Precision Measurement of the Proton Spin Structure Function g<sub>1</sub><sup>d</sup>. Phys. Rev. Lett. **75**: 25-28, 1995.
- Abe, K., *et al.*, E143 collaboration. Precision Measurement of the Proton Spin Structure Function g<sub>1</sub><sup>p</sup>. Phys. Rev. Lett. 74: 246-350, 1995.
- 60. Anthony, *et al.*, E142 collaboration. Measurement of the Neutron Spin Structure Function. Phys. Rev. Lett. **71**:959, 1993.

Journal Abbreviati	on Journal	Number
Phys.Rev.Lett.	Physical Review Letters	25
Phys. Rev. C	Physical Review C	20
Phys. Rev. D	Physical Review D	3
Phys. Lett.	Physics Letters	3
Eur. Phys. J.	European Physical Journal	2
NIM A	Nuclear Instruments and Methods Section A	A 2
Z. Phys.	Zeitschrift Physik	1
Nature	Nature	1

#### Nuclear Physics Publication Table

# **LECTURES:**

1.	"Flipped Classrooms" MUW Brown Bag Series, Mississippi University for Women, January 16, 2014.
2.	"The Education of a Professor" MSU Grisham Master Teacher Series, Mississippi State University, October 25, 2012.
3.	"Sub-threshold J/ $\psi$ Photoproduction" Invited talk, Non-Perturbative Color Forces in QCD workshop, Temple University, March 26, 2012.
4.	"Teacher Academy in the Natural Sciences: Professional Development for Mississippi's Middle School Science Teachers in Geosciences, Chemistry, and Physics." Invited talk, U.S. Department of Education's Math and Science Partnerships Program Regional conference, New Orleans, LA January 30 - February 1, 2012.
5.	"The Qweak Experiment – A Search for New Physics at the TeV Scale by Measurement of the Proton's Weak Charge" Invited talk, MSU Arts & Sciences Faculty Research Showcase, October 16, 2008.
6.	"Subthreshold J/ $\psi$ Production", invited talk, Jefferson Lab Hall C User Group Meeting, January 25, 2007.
7.	"Qweak Infastructure – Target", invited talk, Jefferson Lab Hall C User Group Meeting, January 26, 2007.
8.	"Search for Subthreshold J/ $\psi$ Production" Invited talk, XI International conference on Hadron Spectroscopy, Rio de Janeiro, Brazil, August, 2005.
9.	"Threshold J/ $\psi$ Production at Jefferson Lab" Physics Colloquia, University of Mississippi, February, 2004.
10.	"Nuclear Dependence of $R = \sigma_L / \sigma_T$ in Deep-inelastic Scattering" Invited talk, The Third International Conference on Perspectives on Hadronic Physics, Trieste, Italy, May, 2001.
11.	"Study of a Possible Nuclear Dependence in $R(x,Q^2) = \sigma_L/\sigma_T$ at Small <i>x</i> and $Q^2$ " Contributed talk, 67 <sup>th</sup> Annual Meeting of the APS Southeastern Section, November, 2000.
12.	"Threshold J/ $\psi$ Production at Jefferson Lab" Physics Seminar, University of Maryland, April 1999.

13.	"Sub-Threshold Production of $J/\psi$ Mesons at Jefferson Lab" Physics Colloquium, Mississippi State University, May, 1998.
14.	"Sub-Threshold Production of $J/\psi$ Mesons at Jefferson Lab" Physics Colloquium, Florida International University, April, 1998.
15.	"(Sub) Threshold Production of Vector Mesons at Jefferson Lab" Physics Seminar, The George Washington University, March, 1998.
16.	"(Sub) Threshold Production of Vector Mesons at Jefferson Lab" Physics Seminar, Jefferson Lab, June, 1997.
17.	"A Measurement of $\omega$ Meson Electroproduction at a $Q^2$ of 0.5 (GeV/c) <sup>2</sup> " Contributed talk, April 1997 Meeting of The American Physical Society, April, 1997.
18.	"SLAC Measurement of the Neutron Spin Structure Function" Physics Seminar, CEBAF, November, 1994.
19.	"SLAC Measurement of the Neutron Spin Structure Function" 14 <sup>th</sup> International Conference on Few Body Problems in Physics (Williamsburg, VA), May, 1994.