

JOSEPH FRANCIS OWENS, III

VITÆ

<i>Place of Birth</i>	Syracuse, New York
<i>Date of Birth</i>	September 23, 1946
<i>Citizenship</i>	USA
<i>Marital Status</i>	Married, two children
<i>Education</i>	1968, B.S., Worcester Polytechnic Institute. 1973, Ph.D., Tufts University.
<i>Experience</i>	September 1973-August 1976, Research Associate, Case Western Reserve University. August 1976-May 1979, Research Associate, The Florida State University. May-September 1979, Staff Physicist, The Florida State University. September 1979-September 1980, Research Assistant Professor, The Florida State University. September 1980-August 1982, Assistant Professor, The Florida State University. September 1982-August 1985, Associate Professor, The Florida State University. September 1985-present, Professor, The Florida State University. August 1988-August 1991, Associate Chairman, Physics Department, The Florida State University. August 1991-August 1997, Chairman, Physics Department, The Florida State University. June 2003-present, Associate Dean, College of Arts and Sciences, The Florida State University.
<i>Referee Reports</i>	Reviewed numerous manuscripts for the Physical Review, Physical Review Letters, Physics Letters B and Nuclear Physics B. Reviewed various DOE and NSF research proposals.
<i>Conferences</i>	July 1981, Chaired and organized a session on High- p_T Hadronic Interactions at the XX International Conference on High Energy Physics, Madison, Wisconsin.

	<p>March 1981, Co-chaired a conference on Perturbative Quantum Chromodynamics held at The Florida State University.</p> <p>July 1984, Co-leader of the working group on structure functions, 1984 Snowmass Summer Study.</p> <p>April 1985, Co-chaired a conference on Advances in Lattice Gauge Theory held at The Florida State University</p> <p>October 1987, served as a member of the international organizing Committee for a Nato Advanced Research Workshop on QCD Hard Hadronic Processes, held in St. Croix, U.S. Virgin Islands.</p> <p>May 1988, Served as a member of the organizing committee for the Lattice Higgs Workshop held at The Florida State University.</p> <p>August 1989, Co-leader of the fixed target QCD subgroup, Breckenridge Workshop on Physics at Fermilab in the 1990's.</p> <p>July 1990, Co-leader of the direct photon subgroup, 1990 Snowmass Summer Study.</p> <p>August 1991, Co-chaired and organized two sessions on Jet Physics and QCD at Particles and Fields 1991, Vancouver, B.C.</p> <p>August 1996, Chaired and organized a session on Direct Photon and Two-Photon Physics at the 1996 American Physical Society Division of Particles and Fields Meeting, Minneapolis, Minnesota.</p> <p>November 1996, served on the organizing committee for the CTEQ Symposium on QCD: Puzzles and Challenges, Fermilab, Chicago.</p> <p>March 1999 - March 2000, Co-chaired the working group on direct photon production for the Fermilab Run II Workshop.</p>
<i>DOE Review Board</i>	1982-1984, Served on a panel which reviewed applications for funding under the Department of Energy's Outstanding Junior Investigator program.
<i>URA Visiting Committee</i>	1984-1986, Served on the URA Visiting Committee which reviewed the operation of the Fermi National Accelerator Laboratory.
<i>University Service</i>	<p>Alternate Senator, Florida State University Faculty Senate, 1987 - 1990.</p> <p>Senator, 1990 - 1992.</p> <p>Senator, 1993 - 1997</p> <p>Fall, 1990 - Promotion and Tenure Committee at both the College and University levels.</p> <p>Fall, 1997 - Promotion and Tenure Committee at the Science Area level.</p> <p>Fall, 1998 - Promotion and Tenure Committee at both the College and University levels.</p> <p>Member, College of Arts and Sciences Policy Committee, 1994 - 1997.</p> <p>Chairman, College of Arts and Sciences Policy Committee, 1995 - 1997.</p> <p>Member, Council on Research and Creativity, 2001 - present.</p>

Chair, Council on Research and Creativity, 2005 - present.
Member, Florida State University Marine Lab Advisory Board, 2005
- present.

<i>Field of Research</i>	Theoretical High Energy Physics
<i>Organizations</i>	American Physical Society
<i>Honors and Awards</i>	1968 Elected to membership in Pi Mu Epsilon, a national mathematics honor society 1979 Outstanding Junior Investigator from the Department of Energy 1981 COFRS Award, The Florida State University 1982 Developing Scholar Award, The Florida State University 1984 Elected to Membership in Sigma Xi, a national scientific research society 1986 COFRS Award, The Florida State University 1990 COFRS Award, The Florida State University 1992 Co-winner of the President's Continuing Education Award, FSU (with D.W. Duke) 1994 COFRS Award, The Florida State University 1995 Florida State University Distinguished Research Professor 1995 Florida State University Teaching Incentive Program Award 1996 Fellow of the American Physical Society 1997 Florida State University Professorial Excellence Program Award 2001 Florida State University Named Professor Award 2003 Florida State University Teaching Award
<i>External Funding</i>	Since 1976, a member of the Florida State University High Energy Physics Group supported by the U. S. Department of Energy. Presently Co-Principal Investigator and head of the High Energy Theory program. Funding history (1980 - 2006) 2006 \$1,112,000. 2005 \$1,062,000. 2004 \$1,074,000. 2003 \$1,102,000. 2002 \$1,137,000. 2001 \$1,125,000. 2000 \$1,206,500. 1999 \$ 965,000. 1998 \$ 965,000. 1997 \$ 985,000. 1996 \$ 993,000. 1995 \$1,038,000. 1994 \$1,200,000. 1993 \$1,080,000.

1992 \$1,090,000.
1991 \$1,099,000.
1990 \$1,120,000.
1989 \$ 983,000.
1988 \$ 840,000.
1987 \$ 785,000.
1986 \$ 815,000.
1985 \$ 850,000.
1984 \$ 905,000.
1983 \$ 674,000.
1982 \$ 570,000.
1981 \$ 530,000.
1980 \$ 502,000.

Also, a founding member of the CTEQ Collaboration (Coordinated Theoretical/Experimental Project on Quantitative QCD Phenomenology and Tests of the Standard Model). This is a group of twenty-three researchers from eleven universities, and two national laboratories, funded by the Texas National Laboratory Research Commission from 1991-1994.

Funding history (FSU share)

1991-93 \$25,150.
1993-94 \$18,000.

Outreach Programs

Fall, 1983. Co-organized Saturday Morning Physics – a series of eight lectures on topics in modern physics for area high school students. Served as co-organizer continuously through 1989.

Judged numerous middle and high school science fairs at both the local and regional levels.

Dissertation Title

A Phenomenological Analysis of Charged Pi Nucleon and Pi Delta Photoproduction at High Energies. Major Professor - Prof. Gary R. Goldstein.

Graduate Students Directed

1. L. Bergmann, Ph.D. April, 1989.
2. S. Black, Ph.D. April, 1989.
3. B. Bailey, Ph.D. April, 1993.
4. C. Fink, M.Sc. December, 1995; Ph.D. April, 2001
5. C. Perez, M.Sc. August 1999
6. T. Stavreva, Ph.D. Candidate.

Refereed Journal Publications

1. A New Regge Cut Model. With G.R. Goldstein and R.L. Thews. *Nuclear Physics* **B46**, 557 (1972).
2. π^0 Photoproduction in a Weak Regge-Cut Model. With G.R. Goldstein. *Physical Review* **D7**, 865 (1973).
3. Polarization Predictions for K^+ Photoproduction. With G.R. Goldstein and J.P. Rutherford. *Nuclear Physics* **B53**, 197 (1973).
4. Amplitude Constraints in π^0 Photoproduction. With G.R. Goldstein and J.P. Rutherford. *Nuclear Physics* **B57**, 18 (1973).
5. A Regge Cut Model for Charged πN and $\pi\Delta$ Photoproduction. With G.R. Goldstein. *Nuclear Physics* **B71**, 461 (1974).
6. Spin Correlation Measurements in Pseudoscalar Meson Photoproduction. With G.R. Goldstein and M.J. Moravcsik. *Nuclear Physics* **B80**, 164 (1974).
7. A Comparison of Reactions of the Type $PB \rightarrow V^0\Delta^{++}$. With R.L. Eisner, S.U. Chung and S. Protopopescu. *Nuclear Physics* **B94**, 77 (1975).
8. Unnatural Parity Exchange in $\pi^+p \rightarrow (\rho^0, \omega)\Delta^{++}$. With R.L. Eisner, S.U. Chung and S. Protopopescu. *Physics Letters* **58B**, 376 (1975).
9. Polarization in Inclusive Reactions. With G.R. Goldstein. *Nuclear Physics* **B103**, 145 (1976).
10. Unnatural Parity Exchange in $pp \rightarrow \Lambda + X$. *Physics Letters* **63B**, 341 (1976).
11. A Study of Inclusive Vector Meson Production. With F. DiBianca, R.L. Eisner, W. Fickinger, J.A. Malko, D. Matthews, J. O'Reilly, D.K. Robinson, S.U. Chung and S.D. Protopopescu. *Physics Letters* **63B**, 461 (1976).
12. Amplitude Analyses of the Reactions $\pi^+p \rightarrow (\rho, \omega)\Delta^{++}$ at 7.1 GeV/c. With R.L. Eisner, S.U. Chung and S.D. Protopopescu. *Nuclear Physics* **B112**, 514 (1976).
13. The Role of Absorptive Corrections in a Triple-Regge Analysis of $pp \rightarrow \Delta^{++} + X$. With G.R. Goldstein. *Nuclear Physics* **B118**, 29 (1977).
14. A Study and Comparison of the Inclusive Reactions $\pi^+n \rightarrow \rho^0 + X$ and $K^-p \rightarrow K^{*0} + X$. With R.L. Eisner, W. Fickinger, J.A. Malko, D. Matthews, J. O'Reilly, D.K. Robinson, S.U. Chung and S.D. Protopopescu. *Nuclear Physics* **B119**, 1 (1977).
15. The Role of A_1 Exchange in the Reaction $\pi^-p \rightarrow \pi^+\pi^-n$. With J.D. Kimel. *Nuclear Physics* **B122**, 464 (1977).
16. Λ and K^0 Production in $p \uparrow p$ Interactions at 6 GeV/c. With R.L. Eisner, W. Fickinger, S.L. Glickman, J.A. Malko, D.K. Robinson, S. Dado, A. Engler, G.S. Keyes, T. Kikuchi and R.W. Kraemer. *Nuclear Physics* **B123**, 361 (1977).
17. Regge Cuts and the Spin Dependence of Inclusive Λ Production. *Nuclear Physics* **B131**, 209 (1977).
18. Gluon Contribution to Hadronic J/ψ Production. With M. Gluck and E. Reya. *Physical Review* **D17**, 2324 (1978).
19. Hadronic Υ Production, Parton Distributions, and QCD. With E. Reya. *Physical Review* **D17**, 3003 (1978).
20. On the Q^2 Dependence of Parton Fragmentation Functions. *Physics Letters* **76B**, 85 (1978).
21. Detailed Quantum Chromodynamic Predictions for High- p_T Processes. With E. Reya and M. Gluck. *Physical Review* **D18**, 1501 (1978).

22. Parton Transverse Momentum Effects and the Quantum Chromodynamic Description of High- p_T Processes. With J.D. Kimel. *Physical Review* **D18**, 3313 (1978).
23. Transverse Momentum Distributions for Υ and Dimuon Production in Quantum Chromodynamics. *Physical Review* **D18**, 2462 (1978).
24. High- p_T Baryon Production in Quantum Chromodynamics. *Physical Review* **D19**, 3279 (1979).
25. High- p_T Hadronic Jet Production. *Physical Review* **D20**, 221 (1979).
26. The Photoproduction of Large Transverse Momentum Hadronic Jets. *Physical Review* **D21**, 54 (1980).
27. Jet Mass Effects and High- p_T Jet Production. *Physical Review* **D21**, 742 (1980).
28. Charm Photoproduction with Linearly Polarized Photons. With D.W. Duke. *Physical Review Letters* **44**, 1173 (1980).
29. The High- p_T Production of Direct Photons and Jets in Quantum Chromodynamics. With L. Cornell. *Physical Review* **D22**, 1609 (1980).
30. The Photon Structure Function as Calculated Using Perturbative Quantum Chromodynamics. With D.W. Duke. *Physical Review* **D22**, 2280 (1980).
31. Momentum Distributions for J/ψ Photoproduction. With D.W. Duke. *Physical Letters* **96B**, 184 (1980).
32. Quantum Chromodynamic Predictions for Deep Inelastic J/ψ Production. With D.W. Duke. *Physical Review* **D23**, 1671 (1981).
33. Linearly Polarized Photon Asymmetry Predictions for Inelastic J/ψ Photoproduction. With D.W. Duke. *Physical Review* **D24**, 1403 (1981).
34. Information on Gluon Distributions from Neutrino Deep Inelastic Scattering. With D.W. Duke and R.G. Roberts. *Nuclear Physics* **B195**, 285 (1982).
35. Quantum Chromodynamics Corrections to Deep Inelastic Compton Scattering. With D.W. Duke. *Physical Review* **D26**, 1600 (1982).
36. Quantum Chromodynamics: Theory and Experiment. *Surveys in High Energy Physics* **3**, 65 (1982).
37. Direct Analysis of Scaling Violations in Large Q^2 Deep Inelastic Neutrino and Muon Scattering. With A. Devoto, D.W. Duke and R.G. Roberts. *Physical Review* **D27**, 508 (1983).
38. Compact U(1) in (2+1)D: The Finite Lattice Hamiltonian Approach. With A.C. Irving and C.J. Hamer. *Physical Review* **D 28**, 2059 (1983).
39. Q^2 Dependent Parametrizations of Parton Distribution Functions. With D.W. Duke. *Physical Review* **D30**, 49 (1984).
40. Q^2 Dependent Parametrizations of Pion Parton Distribution Functions. *Physical Review* **D30**, 943 (1984).
41. Large Momentum Transfer Production of Direct Photons, Jets, and Particles. *Reviews of Modern Physics* **59**, 465 (1987).
42. Two Photon Backgrounds for the Intermediate Mass Higgs Boson. With H. Baer. *Physics Letters* **B205**, 377 (1988).
43. Expectations for Two- and Three-Jet Events at HERA. With H. Baer and J. Ohnemus. *Z. Phys.* **C42**, 657 (1989).
44. The Gluon Content of the Proton Probed With Real and Virtual Photons. With P. Aurenche, R. Baier, M. Fontannaz, and M. Werlen. *Phys. Rev.* **D39**, 3275 (1989).
45. A Next-to-Leading-Logarithm Calculation of Jet Photoproduction. With H. Baer and J. Ohnemus. *Phys. Rev.* **D40**, 2844 (1989).

46. A Calculation of the Direct Photon Plus Jet Cross Section in the Next-to-leading-logarithm Approximation. With H. Baer and J. Ohnemus. *Phys. Lett.* **B 234**, 127 (1990).
47. A Next-to-Leading-Logarithm Calculation of Direct Photon Production. With H. Baer and J. Ohnemus. *Phys. Rev.* **D42**, 61 (1990).
48. An Order α_s Calculation of Hadronic ZZ Production. With J. Ohnemus. *Phys. Rev.* **D43**, 3626 (1991).
49. An Updated Set of Parton Distribution Parametrizations. *Phys. Lett.* **B266**, 126 (1991).
50. Event Structure in Photon Plus Two-Jet Final States. With S. Keller. *Phys. Lett.* **B269**, 445 (1991).
51. Parton Distributions of Nucleons. With W.-K. Tung. *Annu. Rev. Nucl. Part. Sci.* **42**, 291 (1992).
52. An order α_s Monte Carlo calculation of hadronic double photon production. With B. Bailey and J. Ohnemus. *Phys. Rev.* **D46**, 2018 (1992).
53. An order α_s Monte Carlo approach to W +Higgs associated production at hadron supercolliders. With H. Baer and B. Bailey. *Phys. Rev.* **D47**, 2730 (1993).
54. An order α_s two photon background study for the intermediate mass Higgs boson. With B. Bailey. *Phys. Rev.* **D47**, 2735 (1993).
55. CTEQ parton distributions and flavor dependence of sea quarks. With J. Botts, J.G. Morfin, J. Qiu, W.-K. Tung, and H. Weerts. *Phys. Lett.* **B304**, 159 (1993).
56. Measuring the Longitudinally Polarized Proton Gluon Distribution using Photoproduction Processes. With S. Keller. *Phys. Rev.* **D49**, 1199 (1994).
57. Handbook of Perturbative QCD. With R. Brock, J.C. Collins, J. Huston, S. Kuhlmann, S. Mishra, J. Morfin, F. Olness, J. Pumplin, J.-W. Qiu, J. Smith, D.E. Soper, W.-K. Tung, H. Weerts, J. Whitmore, and C.-P. Yuan. *Rev. Mod. Phys.* **67**, 157 (1995).
58. Global QCD Analysis and the CTEQ Parton Distributions. With H. Lai, J. Botts, J. Huston, H.G. Morfin, J. Qiu, W.-K. Tung, and H. Weerts. *Phys. Rev.* **D51**, 4763 (1995).
59. A Global QCD Study of Direct Photon Production. With J. Huston, E. Kovacs, S. Kuhlmann, H.-L.Lai, and W.-K. Tung. *Phys. Rev.* **D51**, 6139 (1995).
60. Large Transverse Momentum Jet Production and the Gluon Distribution Inside the Proton. With J. Huston, E. Kovacs, S. Kuhlmann, H.-L.Lai, D. Soper, and W.-K. Tung. *Phys. Rev. Lett.* **77**, 444 (1996).
61. Fully Differential Heavy-quark Contributions to the Photon Structure Functions $F_2^\gamma(x, Q^2)$ and $F_L^\gamma(x, Q^2)$ at Next-to-leading-order in QCD. With B. Harris. *Phys. Rev.* **D54**, 2295 (1996).
62. Improved Parton Distributions from Global Analysis of Recent Deep Inelastic Scattering and Inclusive Jet Data. With H. L. Lai, J. Huston, S. Kuhlmann, F. Olness, D. Soper, W. K. Tung, and H. Weerts. *Phys. Rev.* **D55**, 1280 (1997).
63. Photoproduction of Jets at HERA in Next-to-Leading Order QCD. With B. Harris. *Phys. Rev.* **D56**, 4007 (1997).
64. Jet Photoproduction and the Structure of the Photon. With B. Harris. *Phys. Rev.* **D57**, 5555 (1998).
65. Study of the Uncertainty of the Gluon Distribution. With J. Huston, S. Kuhlmann, H.L. Lai, F. Olness, D.E. Soper, and W.K. Tung. *Phys. Rev.* **D58**, 114034 (1998).
66. Kt Effects in Direct-Photon Production. With L. Apanasevich, C. Balazs, C. Bromberg, M. Begel, T. Ferbel, G. Ginther, J. Huston, S. Kuhlmann, A. Maul, P. Slattery, W. K. Tung, and M. Zielinski. *Phys. Rev.* **D59**, 074007 (1999).

67. Global QCD Analysis of Parton Structure of the Nucleon: CTEQ5 Parton Distributions. With H.L. Lai, J. Huston, S. Kuhlmann, J. Morfin, F. Olness, J. Pumplin, and W.K. Tung, hep-ph/9903282, *Eur. Jour. Phys.* **C12**, 375 (2000).
68. Large-x Parton Distributions. With S. Kuhlmann, J. Huston, J. Morfin, F. Olness, J. Pumplin, W.K. Tung, and J.J. Whitmore, hep-ph/9912283, *Phys. Lett.* **B476**, 291 (2000).
69. Soft-gluon Resummation and NNLO corrections for Direct Photon Production. With N. Kidonakis, hep-ph/9912388, *Phys. Rev.* **D61**, 094004 (2000).
70. Effects of Higher-Order Threshold Corrections in High- E_T Jet Production. With N. Kidonakis, hep-ph/0007268, *Phys. Rev.* **D63**, 054019 (2001).
71. A Next-to-Leading-Order Study of Dihadron Production, hep-ph/0110036, *Phys. Rev.* **D65**, 034011 (2002).
72. The Two Cutoff Phase Space Slicing Method, with B. Harris. hep-ph/0102128, *Phys. Rev.* **D65**, 094032 (2002).
73. Inclusive Jet Production, Parton Distributions, and the Search for New Physics, with Daniel Stump, Joey Huston, Jon Pumplin, Wu-Ki Tung, H. L. Lai, and Steve Kuhlmann, hep-ph/0303013, *JHEP* **0310**, 046 (2003).
74. Next-to-next-to-leading-order soft-gluon corrections in direct photon production, with Nikolaos Kidonakis, hep-ph/0307352, *Int. J. Mod. Phys.* **A19**, 149 (2004).
75. Neutrino Dimuon Production and the Strangeness Asymmetry of the Nucleon, with F. Olness, J. Pumplin, D. Stump, J. Huston, P. Nadolsky, H.L. Lai, S. Kretzer, and W.K. Tung, hep-ph/0312323, *Eur. Phys. J.* **C40**, 145 (2005).
76. The Impact of New Neutrino DIS and Drell-Yan Data on Large-x Parton Distributions, J.F. Owens, J. Huston, C. Keppel, S. Kuhlmann, J.G. Morfin, F. Olness, J. Pumplin, and D. Stump, hep-ph/0702159, *Phys. Rev.* **D75** 054030 (2007).
77. Dihadron Tomography of High-Energy Nuclear Collisions in NLO pQCD, Hanzhong Zhang, J. F. Owens, Enke Wang, Xin-Nian Wang, nucl-th/0701045, *Phys. Rev. Lett.* **98** 212301 (2007).

Note: hep-ph and nucl-th numbers refer to an online database maintained by Cornell University at <http://arXiv.org> where versions of these papers may be found.

Conference and Workshop Publications

1. Gluon Contribution to Hadronic J/ψ Production. With M. Gluck and E. Reya. *AIP Conference Proceedings* **43**, 467 (1978).
2. Quantum Chromodynamics and Large Momentum Transfer Processes. In *High Energy Physics in the Einstein Centennial Year* (Plenum, New York, 1979) p. 347.
3. Quantum Chromodynamics and High- p_T Hadronic Jet Production. In the proceedings of the XIVth Rencontre de Moriond, *Quarks, Gluons, and Jets*, ed. by J. Tran Thanh Van (Editions Frontiere, France, 1979) p. 229.
4. Higher Order Corrections for J/ψ Photoproduction. In the proceedings of the XXth International Conference on High Energy Physics, *High Energy Physics - 1980*, ed. by L. Durand and L.G. Pondrom (AIP, New York, 1981) p.284.
5. Jet Physics at Tevatron II. In *Physics Opportunities for the Fixed-Target Tevatron*, ed. by G.L. Kane and N.M. Gelfand (Fermilab, Batavia, 1981) p. 169.
6. Inelastic J/ψ Photoproduction with Linearly Polarized Photons. With D.W. Duke. *AIP Conference Proceedings* **74**, ed. with D.W. Duke (AIP, New York, 1981) p. 416.

7. Theoretical Developments in Large Transverse Momentum Hadronic Reactions. In the proceedings of the XII International Symposium on Multiparticle Dynamics, *Multiparticle Dynamics 1981*, ed. by W.D. Shephard and V.P. Kenney (World Scientific, Singapore, 1982) p. 553.
8. Direct Photon Production. In the proceedings of the Fermilab Direct Photon Workfest, ed. by D.J. Judd, D.E. Weaver, and E.L. Berger (Fermilab, Batavia, 1981).
9. Models for J/ψ Photoproduction. In the *Proceedings of the Moriond Workshop on New Flavors*, ed. by J. Tran Thanh Van and L. Montenet (Editions Frontieres, France, 1982) p. 62.
10. High- p_T Hadron and Photon Production. *Proceedings of the 13th Spring Symposium on High Energy Physics* (Karl Marx University, Leipzig 1982) p. 16.
11. Determining Λ in Deep Inelastic Scattering. In the proceedings of the XVIIIth Rencontre de Moriond, *Gluons and Heavy Flavors*, ed. by J. Tran Thanh Van (Editions Frontieres, France, 1983) p. 267.
12. Multi-jet Final States: Exact Results and the Leading Pole Approximation. With R.K. Ellis. *Proceedings of the 1984 Summer Study on the Design and Utilization of the SSC*, ed. by R. Donaldson and J.G. Morfin (Fermilab, Batavia, 1984) p. 207.
13. Considerations for the Process $pp \rightarrow W\gamma + X$ at the SSC. With S. Matsuda. *Proceedings of the 1984 Summer Study on the Design and Utilization of the SSC*, ed. by R. Donaldson and J.G. Morfin (Fermilab, Batavia, 1984) p. 216.
14. High- p_T Photon Production and Compositeness at the SSC. With T. Ferbel, M. Dine and I. Bars. *Proceedings of the 1984 Summer Study on the Design and Utilization of the SSC*, ed. by R. Donaldson and J.G. Morfin (Fermilab, Batavia, 1984) p. 218.
15. Structure Functions at the SSC. With J. Morfin. *Proceedings of the 1984 Summer Study on the Design and Utilization of the SSC*, ed. by R. Donaldson and J.G. Morfin (Fermilab, Batavia, 1984) p. 243.
16. Interpreting Measurements of Parton-Parton Scattering Angular Distributions. In the proceedings of the XXth Rencontre de Moriond, *QCD and Beyond*, ed. by J. Tran Thanh Van (Editions Frontieres, France, 1985) p. 151.
17. A Survey of Topics in Two-Photon Physics. In the proceedings of the XVIth International Symposium on Multiparticle Dynamics, *Multiparticle Dynamics 1985*, ed. by J. Grunhaus (Editions Frontieres, France, 1986)p. 725.
18. Some Recent Developments in the Determination of Parton Distributions. In the proceedings of the NATO Advanced Research Workshop on QCD Hard Hadronic Processes, ed. by B. Cox (Plenum Press, NewYork, 1988) p. 279.
19. Applications of QCD to Large Momentum Transfer Processes. Proceedings of the 3rd Lake Louise Winter Institute, *Quantum Chromodynamics: Theory and Experiment*, ed. by B.A. Campbell, A.N. Kamal, F.C. Khanna, and M.K. Sundaresan (World Scientific, Singapore, 1988)p. 1.
20. Higher Order Calculations for Hard Scattering Processes. In *Proceedings of the Storrs Meeting*, Division of Particles and Fields of the American Physical Society, ed. by K. Haller et al. (World Scientific, Singapore, 1989) p. 570.
21. Fixed Target Electroweak and Hard Scattering Physics. With members of the Fixed Target Electroweak and Hard Scattering Group. In *Physics at Fermilab in the 1990's*, Breckenridge, 1989, ed. by D. Green and H. Lubatti (World Scientific, Singapore, 1990) p. 358.
22. A Next-to-Leading-Logarithm Calculation for Direct Photon Production. In *Proceedings of the Rice Meeting*, Division of Particles and Fields of the American Physical Society, ed. by B. Bonner and H. Miettinen (World Scientific, Singapore, 1990) p. 559.
23. Next-to-Leading-Logarithm Calculations of Direct Photon Production. In *Proceedings of the Workshop on Hadron Structure Functions and Parton Distributions*, ed. by D.F. Geesaman, J. Morfin, C. Sazama, and W.K. Tung (World Scientific, Singapore, 1990) p. 264.

24. Event Structure in Photon plus Two-Jet Final States. With S. Keller. In *Research for the Decade - Snowmass 1990*, ed. by E. L. Berger (World Scientific, Singapore, 1992) p. 164.
25. Direct Photon Production. With Jianwei Qiu. In *Research for the Decade - Snowmass 1990*, ed. by E. L. Berger (World Scientific, Singapore, 1992) p. 158.
26. An Order α_s Monte Carlo Calculation of Hadronic Double Photon Production. In the proceedings of the XXVIIth Rencontre de Moriond, *Perturbative QCD and Hadronic Interactions*, ed. by J. Tran Thanh Van (Editions Frontieres, Gif-sur-Yvette, 1992) p. 103.
27. Recent Developments in Global Determinations of Parton Distributions. In MC 93, the proceedings of the International Conference on Monte Carlo Simulations in High Energy and Nuclear Physics, ed. by P. Dragovitsch, S. Linn, and M. Burbank (World scientific, Singapore, 1994)p. 239.
28. Higher Order Corrections to Jet Photoproduction. In the proceedings of the XXIXth Rencontre de Moriond, *'94 QCD and Hadronic Interactions*, ed. by J. Tran Thanh Van (Editions Frontieres, Gif-sur-Yvette, 1994) p. 15.
29. Parton Distributions in Hadrons: the CTEQ program for the global analysis of parton distributions. In the proceedings of the 1995 conference on deep inelastic scattering, *DIS 95*, Paris (1995) p. 257.
30. Photoproduction of Jets at Next-to-Leading Order. With B. W. Harris. In the proceedings of the 1996 Meeting of the American Physical Society, Division of Particles and Fields (DPF 96), Minneapolis, Minnesota, 10-15 Aug 1996, ed. by K. Heller, J.K. Nelson, and D. Reeder (World Scientific, Singapore, 1998) p. 449.
31. Study of the Uncertainty of the Gluon Distribution, J. Huston (presenter), S. Kuhlmann, H.L. Lai, F. Olness, J.F. Owens, D.E. Soper, and W.K. Tung. In the Proceedings of Deep Inelastic Scattering and QCD: DIS 98, Ed. by Gh. Coremans and R. Roosen (Singapore, World Scientific,1998) p. 166.
32. Report of the Working Group on Photon and Weak Boson Production, U. Baur, E.L. Berger, H.T. Diehl, D. Errede (Conveners), D. Casey, T. Dorigo, J. Huston, J.F. Owens, J. Womersley (Subgroup Conveners), L. Apanasevich, M. Begel, Y. Gershtein, M. Kelly, S. Kuhlmann, S. Leone, D. Partos, D. Rainwater, W. Sakumoto, G. Steinbruck, M. Zielinski, and V. Zutshi, hep-ph/0005226, to be published in the Fermilab Run II Workshop proceedings.
33. Parton Densities at High-x, S. Kuhlmann, J. Huston, J. Morfin, F. Olness (presenter), J. Pumplin, J.F. Owens, W.K. Tung, and J.J. Whitmore. To appear in the Proceedings of the 8th International Workshop on Deep Inelastic Scattering and QCD (DIS 2000), Liverpool, England, 25-30 Apr 2000. e-Print Archive: hep-ph/0007141
34. Large-x Parton Distributions, S. Kuhlmann, J. Huston, J. Morfin, F. Olness (presenter), J. Pumplin, J.F. Owens, W.K. Tung, and J.J. Whitmore. To appear in the Proceedings of the Workshop on Nucleon Structure in High x-Bjorken Region (HiX2000), Philadelphia, Pennsylvania, 30 Mar - 1 Apr 2000. e-Print Archive: hep-ph/0007140

Conference Proceedings

1. *Perturbative Quantum Chromodynamics*, AIP Conference Proceedings No. 74, ed. with D.W. Duke (AIP, New York, 1981).
2. *Advances in Lattice Gauge Theory*, ed. with D.W. Duke (World Scientific, Singapore, 1985).
3. *Lattice Higgs Workshop*, ed. with B. Berg, G. Bhanot, M. Burbank, and M. Creutz (World Scientific, Singapore, 1988).

Invited Lecture Series

1. A series of five lectures on Applications of Quantum Chromodynamics at the University of Notre Dame. At the same time, I provided theoretical assistance to the high energy experimental group there (February 1980).
2. A series of eight lectures on Perturbative Quantum Chromodynamics while visiting the University of California, Riverside, for four weeks (May 1982).
3. A set of three lectures at the University of Toronto on High- p_T Photoproduction, Direct Photon Production, and the Photon Structure Function (March 1984).
4. Three lectures on applications of QCD to large momentum transfer processes at the 1988 Lake Louise Winter Institute (March 1988).
5. A set of four lectures on applications of QCD to large momentum transfer processes at the Oak Ridge National Laboratory (October 1988).
6. A set of four lectures on high- p_T phenomenology and QCD, Florida State University, November 1989 - January 1990.
7. Two lectures on perturbative QCD calculations for hard scattering processes, 1992 CTEQ Summer School, Mackinac Island (June 1992).
8. Two lectures on the photoproduction of jets and parton distributions in photons, 1994 CTEQ Summer School, Lake of the Ozarks, Missouri (August 1994).
9. Two lectures on the photoproduction of jets and parton distributions in photons, 1995 CTEQ Summer School, Bad Lauterburg, Germany (July 1995).
10. Two lectures on jet photoproduction and the hadroproduction of direct photons, 1997 CTEQ Summer School, Lake Geneva, Wisconsin (June 1997).
11. Two lectures on lepton pair and vector boson production, 1998 CTEQ Summer School, Courmayeur, Aosta Valley, Italy (July 1998).
12. Two lectures on lepton pair, W , and Z production, 2000 CTEQ Summer School, Lake Geneva, Wisconsin (June 2000).
13. A lecture on single and double photon processes at high energies, CTEQ 2001 Summer School, St. Andrews, Scotland (June 2001).
14. A lecture on direct photon production, 2004 CTEQ Summer School, University of Wisconsin, Madison (June 2004).
15. A lecture on direct photon production, 2005 CTEQ Summer School, Puebla, Mexico (May 2005).
16. A lecture on photons in large transverse momentum processes, 2006 CTEQ Summer School, Rhodes, Greece (July 2006).
17. Two lectures on Parton Distribution Functions and Global Fitting, CTEQ Summer School, University of Wisconsin, Madison (June, 2007).

Seminars, Colloquia, and Other Presentations (since 1979)

1. "High- p_T Hadronic Jet Production", Laboratoire de Physique Théorique et Hautes Énergies, Orsay, France, March 1979.
2. "Quantum Chromodynamic Predictions for High- p_T Baryon Production", Laboratoire de Physique Théorique et Hautes Énergies, Orsay, France, March 1979.
3. "High- p_T Hadronic Jet Production", CERN, Geneva, Switzerland, March 1979.
4. "QCD - A Colorful Theory of Quarks and Gluons", University of Florida, May 24, 1979.
5. "Photons, Jets, and QCD", Florida State University, October 2, 1979.

6. "Photon Structure Functions", Florida State University, November 27, 1979.
7. "High- p_T Direct Photon Production", Florida State University, January 15, 1980.
8. "Polarized Photons, Charmed Particles, and QCD", Florida State University, January 29, 1980.
9. "Small Momentum transfer Distributions in Hard Processes", Florida State University, March 5, 1980.
10. "Constituent Interchange Model – A Question of Normalization", Florida State University, April 29, 1980.
11. "The Photon - A Unique Tool for for Studying QCD", University of Florida, October 2, 1980.
12. "Field Theory on a Lattice", Florida State University, November 4, 1980.
13. "The Wilson Loop", Florida State University, November 18, 1980.
14. "Recent Ideas in High Energy Physics", Florida State University, Education Department, April 15, 1981.
15. "QCD - Should We Believe It?", Tufts University, May 8, 1981.
16. "Theoretical Developments in High- p_T Physics", Florida State university, June, 1981.
17. "Quantum Chromodynamics – Theory and Experiment", New Orleans meeting of the South-east Section of the American Physical Society, November 15, 1981.
18. "Quantum Chromodynamics Predictions for Deep Inelastic Compton Scattering", CERN, Geneva, Switzerland, January, 1982.
19. "High- p_T Hadronic Jets: how far have we come and where do we go from here?", Rice University, March 30, 1983.
20. "Unification - an overview of modern physics", Florida State University, October 20, 1983.
21. "Unification - an overview of modern physics", University of Alabama, October 26, 1983.
22. "Unification - an overview of modern physics", Stillman College, October 27, 1983.
23. "High- p_T Hadronic Jets", University of Alabama, October 26, 1983.
24. "Scaling Violations in Deep Inelastic Scattering", University of Maryland, May, 1984.
25. "Direct Photon Production", University of Maryland, May, 1984.
26. "Interpreting Measurements of Parton-Parton Scattering Angular Distributions", Laboratoire d'Annecy de Physique des Particules, Annecy, France, March 19, 1985.
27. "Lessons Learned from High- p_T Hadron Scattering", University of Arizona, January 22, 1986.
28. "Direct Photon Production", Florida A&M University, March 21, 1986.
29. "Heavy Flavor Production", Florida A&M University, March 21, 1986.
30. "Direct Photon Production", Fermilab, October 1986.
31. "15 Years of High Energy Colliders", Florida State University, April 9, 1987.
32. "15 Years of High Energy Colliders", University of Alabama, September 15, 1987.
33. " $B - \bar{B}$ Mixing", Florida State University, October 26, 1987.
34. "16 Years of Collider Physics", University of Tennessee, October 18, 1988.
35. "16 Years of Collider Physics", Rice University, November 2, 1988.
36. "Higher Order Monte Carlo Calculations for Jet Photoproduction", Rice University, 1988.
37. "Direct Photon Production", Michigan State University, 1988.
38. "16 Years of Collider Physics", University of South Alabama, February 10, 1989.

39. "Higher Order Calculations for Direct Photon Production", Breckenridge Workshop on the Fermilab Physics Program in the 1990's, Breckenridge, Colorado, August 1989.
40. "The Standard Model of High Energy Physics – Theory Confronts Experiment", Florida State University, November 30, 1989.
41. "Some recent Calculations for Direct Photon Production", SAHEP Theory Conference, Gulf Shores, Alabama, January 1991.
42. "(How) Can We Use Direct Photon Production to Assist in the Determination of Parton Distribution Functions?", University of Wisconsin - Madison, May, 1991.
43. "Recent Developments in Global Determinations of Parton Distributions", Atmospheric Neutrino Workshop, Louisiana State University, May, 1993.
44. "Photoproduction of Jets", Workshop on Jet Production in Deep Inelastic Scattering on Nucleons and Nuclei, Fermilab, December 1993.
45. "Parton Distributions in Photons and Hadrons", invited talk at the 1994 meeting of the German Physical Society, March, 1994.
46. "Parton Distributions in Photons and Hadrons", seminar at DESY-Zeuthen, March, 1994.
47. "Parton Distributions in Hadrons", seminar at the D0 Workshop, FSU, February, 1995.
48. "Recent Results in Direct Photon Production", seminar at the D0 Workshop, FSU, February, 1995.
49. "Parton Distributions in Hadrons - the impact of the HERA small- x data", seminar at the CMS Workshop, FSU, March, 1995.
50. "The Inclusive Jet Cross Section at High Energies", FSU, February, 1996.
51. "QCD: Puzzles and Challenges", opening talk at the CTEQ symposium of the same name, Fermilab, November, 1996.
52. "The Standard Model of High Energy Physics: Phenomenology at FSU", Departmental Colloquium, FSU, February, 1998.
53. "Direct Photons and Global Fits for Parton Distributions", LHC QCD Workshop, CERN, Geneva, Switzerland, January, 1999.
54. "Progress in Precision Perturbative QCD Calculations for Large Momentum Transfer Processes", plenary talk at the Pheno '99 Symposium, "Phenomenology for the Third Millennium", University of Wisconsin - Madison, April 1999.
55. "Threshold Resummation for Direct Photon Production - an update", Fermilab Run II Workshop, November 4, 1999.
56. "Some Comments on Unintegrated Parton Distributions and Direct Photon Production", presented at the Spring 2000 CTEQ Meeting, Argonne National Laboratory, March 3, 2000.
57. "Direct Photon Production - a status report", presented at the Event Generator for RHIC Spin Physics III Workshop, Brookhaven National Laboratory, March 6, 2000.
58. "Parton Distributions - Then and Now", presented at Cosener's House, Abingdon, England at "Robertsfest", a meeting in honour of Dick Roberts' 60th birthday, May 28, 2000.
59. "Isolated Photon Cross Sections - behavior for small isolation parameters", presented at the Fall 2000 CTEQ Meeting, Argonne National Laboratory, October 23, 2000.
60. "QCD Hard Scattering and Massive Hadron Pair Production", Indiana University, September 21, 2001.
61. "QCD Hard Scattering and Massive Hadron Pair Production", Florida State University, October 2, 2001.
62. "The Unity of Physics...or Things I Wish I'd Paid Attention To as an Undergraduate", SPS Chapter talk, FSU, October 16, 2001.

63. "QCD Hard Scattering and Massive Hadron Pair Production", Argonne National Laboratory, October 27, 2001.
64. "The Unity of Physics...or Things I Wish I'd Paid Attention To as an Undergraduate", lecture in PHY-1090, Discovering Physics, FSU, April 10, 2002.
65. " γ + Jet Angular Distributions – a next-to-leading-order update", CTEQ Workshop, Fermi National Accelerator Laboratory, April 26-27, 2002.
66. "Jet Cross Sections – higher order corrections at high rapidity", CTEQ Workshop, Fermi National Accelerator Laboratory, April 26-27, 2002.
67. "The Unity of Physics...or Things I Wish I'd Paid Attention To as an Undergraduate", lecture in PHY-1090, Discovering Physics, FSU, November 20, 2002.
68. "The Unity of Physics...or Things I Wish I'd Paid Attention To as an Undergraduate", lecture in PHY-1090, Discovering Physics, FSU, October 8, 2003.
69. "Photons, Fragmentation, and Isolated Cross Sections", CTEQ Meeting, Michigan State University, October 18, 2003.
70. "QCD Hard Scattering and Massive Hadron Pair Production", Brookhaven National Laboratory, December 3, 2003.
71. "The Unity of Physics...or Things I Wish I'd Paid Attention To as an Undergraduate", lecture in PHY-1090, Discovering Physics, FSU, February 25, 2004.
72. "The CTEQ Global Fitting Project", Brookhaven National Laboratory, July 19, 2005.
73. "The CTEQ Global Fitting Project and the impact of parton distribution functions at large x ", Thomas Jefferson National Laboratory, August 19, 2005.
74. "Parton Distribution Function Projects - a status report", Fall CTEQ meeting at the Thomas Jefferson National Laboratory, November 11, 2005.
75. "The CTEQ Global Fitting Project and the impact of parton distribution functions at large x ", invited talk at the Dallas APS Meeting, April 24, 2006.
76. "The Impact of New Neutrino DIS and Drell-Yan Data on Large- x Parton Distribution Functions", Fall CTEQ Meeting at Southern Methodist University, December 1, 2006.
77. "Nuclear Parton Distribution Functions", Rutgers University, January 12, 2007, invited talk at the Division of Nuclear Physics Long Range Planning Meeting.
78. "Parton Distribution Functions - A Glance Back and A Look Ahead", Michigan State University, May 12, 2007, invited talk at a symposium honoring Wu-Ki Tung on his retirement.
79. "Nuclear Corrections and Parton Distribution Functions - Lessons learned from Global Fitting", NuInt07, Fermilab, June 3, 2007, invited talk on neutrino interactions and nucleon PDFs.