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Education:

- Ph.D. in Theoretical Particle Physics, Minor in Mathematics. University of Wisconsin–Madison, August 1985.
- M.S. in Physics. University of Wisconsin–Madison, August 1982.
- B.S. in Physics and Mathematics. Duke University, May 1980. Honors Research Thesis, Graduated with Distinction in Physics; Magna Cum Laude.

Academic Positions:

- **Southern Methodist University**, Department of Physics, Theoretical Particle Physics Group.
Assistant Professor: *1991 - 1996.*
Associate Professor: *1996 - 2003.*
Professor: *2003 - present.*
Chair: *2001 - 2007.*
President, Faculty Senate: *2009 - 2010.*
Joint Appointment with Engineering: *2007 - present.*
- **CERN**, (*Centre Européen pour la Recherche Nucléaire*) Guest Scientific Associate, Theoretical Physics Group & Atlas Collaboration. *July 2007 - Aug. 2008.*
- **Fermilab**, Visiting Scientist, Theoretical Physics Group. *Sept. 1997 - Aug. 1998.*
- **Superconducting SuperCollider Laboratory**, SSC Fellow 1993-94. Physics Research Group, Guest Scientist. *August 1991 to 1994.*
- **University of Oregon**, Institute of Theoretical Science, Theoretical Particle Physics Group. Postdoctoral Research Fellow. *September 1988 to August 1991.*
- **Universität Dortmund**, Institut für Theoretische Physik. Visiting faculty member, guest of Prof. E. A. Paschos. *April–May 1989.*
- **Illinois Institute of Technology**, Theoretical Particle Physics Group. Postdoctoral Research Fellow. *September 1985 to August 1988.*

- **University of Wisconsin–Madison**, Theoretical Particle Physics Group. Research Assistant. *May 1982 to August 1985.*
- **University of Wisconsin–Madison**, Experimental High Energy Physics Group. Research Assistant. Assisted in the preparation of experiment **E609** at Fermilab. *Summer 1981.*
- **Los Alamos Scientific Laboratory**. Research Assistant, Geophysics Group. Developed computer codes to simulate multiphase fluid flow on CDC 7600 and Cray 1 systems. *Summers 1979-80.*
- **Duke University**, Triangle Universities Nuclear Laboratory. Research Assistant. Performed and analyzed a $^{13}\text{C}(p, \gamma)^{14}\text{N}$ experiment as a portion of Honors Research Thesis. *September 1979 to May 1980.*

Awards, Grants, and Scholarships:

- Initiated DOE Theory grant at SMU in May 1992. Continued funding from 1992 to present, and supplemental funding for CTEQ related activities at Fermilab. Principal Investigator for Theory Task.
- Nine of my papers have been designated as “Very well-known” (100+ citations), and two of these have been designated as “Renowned” with over 1000 citations. (Designations based upon citations as recorded in the Spires database)
- One of the “Renowned” papers was the most cited paper in the High Energy Physics Phenomenology archive in 1999.
www.slac.stanford.edu/library/topcites/top40.1999.E.hep-ph.2.html
- 2007-08 CERN support for research sabbatical in Geneva, Switzerland
- 2006-08: Received DFG (Deutsche Forschungsgemeinschaft) German Research Foundation fellowship for postdoc Ji-Young Yu.
- 2007 Recipient: Sam Taylor Fellowship
- 2007 SMU “M” Award: This is the most highly coveted recognition given to students, faculty, staff, and administrators for service to the University.
- 2006 Recipient: University Distinguished Citizen Award.
- Fellow of the American Physical Society. Elected 2005 “*for significant contributions to understanding nucleon structure and heavy quark production in perturbative quantum chromodynamics.*” Elected membership limited to 1/2% of APS members.
- 2000 Recipient: SMU President’s Associates Outstanding Faculty Award.

- QuarkNet Grant awarded by DOE and NSF to involve local HS teachers with LHC research. 2000-01. Organized a 2-week workshop for 18 teachers, 4-14 June 2001. Workshops held annually since then.
www.physics.smu.edu/~olness/quarknet/
- SSC Fellowship, 1993-94. One of 6 Theory Faculty selected in a nation-wide competition.
- TNRLC Grant to CTEQ Collaboration. 1992-1994.
- H.O.P.E. *Honored on Professor Excellence* Distinguished Honoree Award, Spring 2001. Based on teaching excellence, and selected by SMU student Resident Assistants. I also received the HOPE award in both 1999 and 2000.
- SMU University Research Council Faculty Research Grant.
 - 1994: To support visit to CERN, DESY, Moriond, ITEP, Dubna.
 - 1999: To support visit to 13'th Hadron Collider Workshop, Mumbai, India.
 - 2004: To support visit to CERN Les Houches Workshop.
- SMU Instructional Technology Grant to integrate Mathematica in the physics curriculum, 1993.
- National Science Foundation Scholarship to attend *Theoretical Advanced Study Institute in Elementary Particle Physics*, Yale University, June 9–July 5, 1985.
- Graduate School Dean's Fellowship, University of Wisconsin–Madison, 1983–84. One of ten selected in a university-wide competition.
- Associated Universities Incorporated Scholarship, awarded through Brookhaven National Laboratory, 1976–1980. One of ten selected in a merit competition.

Recent Professional Activities:

- Chair: 2006-09 LHC Theory Initiative Fellowship Selection Committee. Awarded \$750K+ in fellowships. <http://www.lhc-ti.org>
- Workshop participant for the Les Houches Workshop 2009: Physics at TeV Colliders.
- Organizing Committee: CTEQ/MCnet Summer School on QCD Analysis and Phenomenology, 7-17 August 2008, Debrecen, Hungary.
- DOE Site Review Committee: UW-Madison. 14 - 16 May 2007
- 2005—Present: Member, LHC Theory Initiative Steering Committee. Initiative funded by NSF.
- Recent conference presentations at: PDF4LHC (Feb. 2008), DIS'2008 (April 2008), HERA4LHC (May 2008), Atlas Standard Model meeting (June 2008), Ringberg Workshop (Oct. 2008), LoopFest VIII (May 2009), CTEQ School (June 2009).

- Organized and instructed SMU QuarkNet workshop for local High School science teachers. 4-14 June 2001, and follow up workshops 11-14 June 2002, 9-13 June 2003, 7-11 June 2004, 6-10 June 2005, 5-9 June 2006, & 4-8 June 2007.
- Dallas Regional Science Fair, Co-Director. 800+ seventh through twelfth grade students from 20 Dallas-area schools will be judged by 300+ judges from area businesses, professional organizations and schools. www.DallasScienceFair.org
- Lecturer at CTEQ Summer School on QCD Analysis and Phenomenology, *Heavy Quark Production*, 19 - 27 May 2005; Puebla, Mexico.
- Workshop participant for the Les Houches Workshop 2005: Physics at TeV Colliders.
- Lecturer at CTEQ Summer School on QCD Analysis and Phenomenology, *Lepton Pair and Weak Boson Production*, 22-30 June 2004, UW-Madison.
- Physics Convener for the G-TeV proposal at Fermilab. Organize workshops (May 2004).
- “Mathematica for Physics” has been translated into Japanese [ISBN 4-89471-162-1], and the 2nd edition [ISBN 0-201-53796-6] was released in 2002.
- Lecturer at CTEQ/IFAE Summer School on QCD Analysis and Phenomenology, Sant Feliu de Guixols, Catalonia, Spain, *Lepton Pair and Weak Boson Production*, 22 - 30 May 2003
- Lecturer at CTEQ Summer School on QCD Analysis and Phenomenology, *Charm and Bottom Quark Production*, 4-10 June 2002, UW-Madison.
- Subgroup convener for the Snowmass 2001 Workshop for the following groups:
 - P5-A: Parton Distributions, Spin and Resummation Sub-Group
 - E1-C: Retro/Exotic Neutrino Interactions
 - E4-B: Snowmass 2001: Hadron Benchmarks Working Group
- Workshop participant for the 2001 Les Houches Workshop: Physics at TeV Colliders. Contributed to i) Resummation and ii) Heavy Flavours working groups.
- Banquet Keynote speaker. SPS Zone 8 Regional Meeting, November 10-11, 2000, University of Louisville, Louisville, KY.
- Lecturer at CTEQ Summer School on QCD Analysis and Phenomenology, 30 May - 7 Jun 2000 , Lake Geneva, WI.
- Subgroup convener for the Heavy Quark Production and PDF’s Subgroup of the PDF group. QCD and Weak Boson Run II Workshop. March-November 1999.
- Invited presentation at NuTeV collaboration meeting, Fermilab, 5 June, 1999.
- Plenary conference presentation at 13th Hadron Collider Physics Conference, Mumbai, India, 14-20 January, 1999.

Teaching Experience:

- **Outstanding Faculty Award:** My receipt of the 2000 SMU President's Associates Outstanding Faculty Award was based on both my teaching and research performance.
- **H.O.P.E. Distinguished Honoree Award:** Spring 2001. I also received a H.O.P.E. (Honored on Professor Excellence) Award in both 1999 and 2000. Recipients are selected, based upon teaching excellence, by the SMU student RA's.
- **Novel Music & Physics Course:** In 2000, I developed a novel physics course (PHYS 1320, Music & Physics) in collaboration with Professor Tom Tunks of the Meadows School of Music. We offer this course annually, and continue to fill our enrollment, and even have a waiting list of students.
- **The Secret City: Los Alamos and the Atomic Age:** In collaboration with Prof. James Hopkins (History), I developed new course for the 2006 Taos Cultural Institute. *"This was the most stimulating and interesting cultural course I've ever taken, and I will encourage my friends to take it next year. I absolutely loved every minute!"* Nancy Dedman, participant in the 2006 Los Alamos course.
- **Southern Methodist University:** *Fall 1991 - Present.*
General Physics 1303 & 1304, 1403 & 1404, Music & Physics 1320, Cosmology & Astrophysics 3368, Methods of Theoretical Physics 4321, Electromagnetism 4392, Solid State Physics 5337, Graduate Classical Mechanics 6321, Particle Physics 7360, Quantum Field Theory 7314.
Median score of teaching evaluations by students are consistently 9 or 10 on a scale of 10 (old system), or 3 or 4 on a scale of 4 (new system).
- **University of Oregon:** *Fall Term 1989.*
General Physics: Newtonian Mechanics. Enrollment of 208 students; 4 lectures and 2 help sessions per week; supervised 3 graduate teaching assistants; wrote exams and quizzes.
Based on formal university survey, received outstanding recommendations from students: rated 4.22 of 5.00; 12 year department average, 3.68 of 5.00.
- **University of Wisconsin–Madison:** *Fall 1980 - Spring 1982.*
Teaching Assistant for 4 semesters in General Physics. Taught 4 one hour recitations and 2 three hour labs per week. Approximately 20 students per class.

Personal Diversions:

- Presented special colloquium on *A Physics Circus, Music and Physics: A Harmonic Function*, and lectures on *The Group Theory of Rubik's Cube*. Perform baroque and classical trumpet solos for weddings and other events; play with a brass ensemble. Perform piccolo trumpet solos for church services and weddings including services at SMU's Perkins Chapel.

Graduate Student Supervision at SMU:

- Director, Graduate Physics Program, 1995-98. I recruited graduate students for our program, and also coordinated the program for the enrolled students.
- B. Alex King, M.S. (1994). Projects: Matrix elements for radiative τ decay ($\tau \rightarrow \nu_\tau \mu \nu_\mu e^+ e^-$) with FORM and FeynCalc, and Mathematica notebooks and associated investigations for CTEQ1 PDF code.
- Guoheng Wei, M.S. (1995). Projects: Mathematica Mathlink interface and associated investigations for CTEQ2 PDF code. (M.S. Thesis with Stroynowski.)
- Guanyao Bao, M.S. (1995). Projects: Mathematica notebooks and associated investigations for CTEQ3 PDF code.
- Ge Li, M.S. (1995). Projects: Miscellaneous Mathematica based topics.
- Jian Wang, M.S. (1997). Projects: Choice of initial parameterizations of PDF's for global analysis. (Sec. 2E, hep-ph/9706470)
- Wanjun Yu, M.S. (1997). Projects: $\{x, Q^2\}$ Kinematic Maps for PDF's. (Sec. 2B, hep-ph/9706470)
- Michael Harris, M.S. (1997). Projects: Miscellaneous Mathematica based topics.
- Elena Magar, (1999-2000). Projects: Mathematica notebooks and associated investigations for CTEQ4 PDF code.
- Tamara Trout, (2000-01). Projects: Mathematica notebooks and associated investigations for CTEQ5 PDF code. $d\sigma/dP_T$ investigations for neutrino DIS charm production.
- Jack Daeschler, (2001-02). Projects: NLO calculations for heavy quark production at Tevatron Run II.
- Yon Cole, M.S. (2006). Projects: Spin-dependent structure functions (g_1) in the asymptotic region.

Undergraduate Student Supervision at SMU:

- Undergraduate Physics Co-Advisor, 1998-2001. During the period 1998-2001, I increased the number of physics majors from 4 to 12. This group of physics students was of exceptional quality, and included seven SMU President's Scholars in their ranks.^{*} Additionally, Alonso Gutierrez and Michael Shearn were selected in a national competition to receive a prestigious Goldwater Scholarship.

^{*} Anne Burnham, Alonso Gutierrez, April Kramer, Chad Myers, Michael Shearn, Shannon Thornton, and Clifford Yapp.

Memberships, Review and Editorial Activities:

- Member of the Coordinated Theoretical/Experimental Project on Quantitative QCD (CTEQ) collaboration
- Member of the ATLAS (A Torodial LHC Apparatus) Collaboration.
Must complete service work before joining the author list.
- Referee for:
 - The Physical Review
 - Physics Letters B
 - European Physics Letters
 - Advances in High Energy Physics
 - Zeitschrift für Physik C
 - Computer Physics Communications
 - Addison-Wesley Publishing Co.
 - John Wiley & Sons Inc. Publishing Co.
- Reviewer for:
 - Department of Energy
 - National Science Foundation
 - U.S. Civilian Research & Development Foundation
- *Memberships:*
 - Sigma Xi Scientific Research Society;
 - American Physical Society;
 - American Institute of Physics.

University Service and Committees:

Arranged in approximate chronological order.

- Academic Research Computing Steering Committee. 1994-95
- Director of Graduate Studies in Physics. 1995-1997
- Director of Undergraduate Studies in Physics. 1998-2001
- Commission on Teaching and Learning—Center for Teaching Excellence. 2000-2003, and 2006.
- Dedman College Undergraduate Council. 2000
- Chair, Department of Physics. 2001-2007.
- Strategic Plan for Informational Technology: Academic and Research Computing. 2001
- SMU Faculty Senate; member 2001-2007;
Senate Executive Committee (2001-2003);
Finance Committee (2001-2007).
- Academic and Research Computing Committee (ARCC). (2002-2007)
Chair (2004-2006).
- University Committee on Informational Technology (UCIT) (2004-2006).
- Dedman College Tenure and Promotion Committee (2003-2005).
- Dedman College Dean's Search Committee (2005-06)
- Upper-class President's Scholars Review Panel (2003-2007).
- Advisor, Dean's Scholars Program (2005-2007).
- School of Engineering Tenure and Promotion Committee (2006-2007).
- Chair, Associate Vice President for Research and Dean of Graduate Studies committee (2006-2007).
- SMU Faculty Senate; member 2008-2011;
Senate Executive Committee (2008-2011);
President Elect, (2008-2009).
President, (2009-2010).

Books:

- *Mathematica for Physics*, First edition. ISBN 0-201-53796-6. By Robert Zimmerman & Fredrick Olness, published by Addison-Wesley, Reading, MA (1994). Foreword by Stephen Wolfram, creator of Mathematica.
- *Mathematica for Physics*, Japanese translation. ISBN4-89471-162-1.
- *Mathematica For Physics: 2nd Edition*. ISBN 0-201-53796-6. By Robert Zimmerman & Fredrick Olness, published by Addison-Wesley, Reading, MA (2002). Foreword by Stephen Wolfram, creator of Mathematica. The second edition is expanded to include a wider variety of topics in more depth.

This is a textbook designed to incorporate the computer algebra program Mathematica into the core physics curriculum. This book includes solved examples of classic physics problems which will inspire the student to reproduce, modify, and experiment with them. Topics include: Mechanics, Electromagnetism, Quantum Mechanics, Relativity and Cosmology Oscillating Systems, Non-Linear Systems, Discrete Dynamical Systems, Lagrangians and Hamiltonians, and Orbiting Bodies.

An electronic supplement complements the text, and is available at (mathsource.wri.com & www.physics.smu.edu/~olness).

Publications:

Arranged in chronological order.

Publications prior to 1995 available upon request.

- 42) *Handbook of Perturbative QCD: Version 1.0*, CTEQ Collaboration, Raymond Brock, et al., *Reviews of Modern Physics*, **67**, p.157-248 (1995).
- 43) *Leptoproduction of Heavy Quarks in the Fixed and Variable Flavor Schemes*, F. Olness and S. Riemersma.
Presentation by F. Olness at *Particles & Fields '94: Meeting of the Division of Particles & Fields of the APS*, Albuquerque, NM, 2-6 August 1994.
The Albuquerque Meeting DPF '94, ed. S. Seidel, p. 1698, (1995).
- 44) *Leptoproduction of Heavy Quarks in the Fixed and Variable Flavor Schemes*, F. Olness and S. Riemersma.
Physical Review **D51**, 4746 (1995).
- 45) *Leptoproduction of Heavy Quarks*, Pankaj Agrawal, Fredrick I. Olness, Stephan T. Riemersma, Wu-Ki Tung. Presentation by F. Olness.
Proceedings of 30th Rencontres de Moriond: QCD and High Energy Hadronic Interactions, Meribel les Allues, France, 19-25 Mar 1995, p. 353 (1995).
- 46) *Semi-Inclusive Deeply Inelastic Scattering at Electron-Proton Colliders: From Small to Large P_T* , with R. Meng and D. Soper.
Physical Review **D54**, 1919 (1996).

- 47) *Heavy Quark Hadroproduction: Resumming Large Logarithms Via Heavy Quark PDF's*, F. Olness, R. Scalise, and Wu-Ki Tung.
Presentation by R. Scalise. Published in the proceedings of the *Particles & Fields '96: Meeting of the Division of Particles & Fields of the APS*. World Scientific, Ed., K. Heller, J.K. Nelson, and D. Reeder. Minneapolis, MN, 10-15 August 1996, p.832.
- 48) *Structure Function Subgroup Summary*, M.G. Albrow, *et al.*
Proceedings of *New Directions for High-Energy Physics (Snowmass 96)*, Snowmass, CO, 25 Jun - 12 Jul 1996. p.1079. hep-ph/9706470.
New Directions For High-Energy Physics: proceedings. Edited by D.G. Cassel, L. Trindle Gennari, R.H. Siemann. Stanford Linear Accelerator Center, 1997. p.1079-1092.
- 49) *QCD Subgroup On Diffractive And Forward Physics*, M.G. Albrow, *et al.*
Proceedings of *New Directions for High-Energy Physics (Snowmass 96)*, Snowmass, CO, 25 Jun - 12 Jul 1996. ANL-HEP-CP-97-40.
New Directions For High-Energy Physics: proceedings. Edited by D.G. Cassel, L. Trindle Gennari, R.H. Siemann. Stanford Linear Accelerator Center, 1997. p.1109-1119.
- 50) *Precision Measurements Of Heavy Objects Working Group Summary*, M. Demarteau, V. Koulovasilopoulos, J. Lykken, F.I. Olness, S. Parke, R.J. Scalise, E. Varnes G.P. Yeh.
Contributed to *Very Large Hadron Collider Physics and Detector Workshop: Beyond the LHC*, Batavia, IL, 13-15 Mar 1997. hep-ph/9708331.
- 51) *Summary of the Very Large Hadron Collider Physics and Detector Workshop*, G. Anderson, U. Baur, M. Berger, F. Borchardi, A. Brandt, D. Denisov, S. Eno, T. Han, S. Keller, D. Khazins, T. LeCompte, J. Lykken, F. Olness, F. Paige, R. Scalise, L. Simmons, G. Snow, C. Taylor, J. Womersley.
Conference report of: *Physics at the high energy frontier beyond the LHC*, March 13-15, 1997, Fermi National Accelerator Laboratory, Batavia, Illinois. hep-ph/9710254.
- 52) *Selective Transfer of Calcium from an Acidic Compartment of the Mitochondrion of Trypanosoma brucei: Measurements with Targeted Aequorins*, Zhao-Hui Xiong, Evelyn L. Ridgley, David Enis, Fred Olness, and Larry Ruben.
Journal of Biological Chemistry, Vol. 272, No. 49, p. 31022, 1997.
- 53) *Improved Parton Distributions From Global Analysis Of Recent Deep Inelastic Scattering And Inclusive Jet Data*, H.L. Lai, J. Huston, S. Kuhlmann, F. Olness, J. Owens, D. Soper, W.K. Tung, H. Weerts.
Physical Review **D55**, 1280 (1997).
- 54) *Heavy Quark Parton Distributions: Mass Dependent Or Mass Independent Evolution?* F.I. Olness, R.J. Scalise.
Physical Review **D57**, 241 (1998).
- 55) *Heavy Quark Parton Distributions: Mass Dependent Or Mass Independent Evolution?* F.I. Olness, R.J. Scalise.
Proceedings of the 5th International Workshop on Deep Inelastic Scattering and QCD (DIS 97), Chicago, IL, 14-18 Apr 1997, p.320.

- 56) *Study Of The Uncertainty Of The Gluon Distribution*. J. Huston, S. Kuhlmann, H.L. Lai, F. Olness, J.F. Owens, D.E. Soper, W.K. Tung. FERMILAB-CONF-98-180-T.
Proceedings of 6th International Workshop on Deep Inelastic Scattering and QCD (DIS 98), Brussels, Belgium, 4-8 Apr 1998, p.166.
- 57) *Theoretical Description Of Heavy Quark Production In DIS*, J. Amundson, F. Olness, C. Schmidt, W.K. Tung, and X. Wang. FERMILAB-CONF-98-153-T.
Proceedings of 6th International Workshop on Deep Inelastic Scattering and QCD (DIS 98), Brussels, Belgium, 4-8 Apr 1998, p.141.
- 58) *Heavy Quark Hadroproduction in Perturbative QCD*, F. Olness, R. Scalise, and Wu-Ki Tung. hep-ph/9712494.
Physical Review **D59**, 014506 (1999).
- 59) *Study Of The Uncertainty Of The Gluon Distribution*. J. Huston, S. Kuhlmann, H.L. Lai, F. Olness, J.F. Owens, D.E. Soper, W.K. Tung. hep-ph/9801444.
Physical Review **D58**, 114034 (1998).
- 60) *Asymptotic high energy behavior of the deeply virtual Compton scattering amplitude*, B.I. Ermolaev, F. Olness, A.G. Shuvaev.
Physical Review **D60**, 034013 (1999).
- 61) *Deep inelastic scattering at a muon collider: Neutrino physics*, H. Schellman *et al.*. Workshop on Physics at the First Muon Collider, Batavia, IL, 6-9 Nov 1997, pp.166-176.
- 62) *Heavy Quark Production*, F.I. Olness. (hep-ph/9812270) 4th Workshop on Heavy Quarks at Fixed Target (HQ 98), Batavia, IL, 10-12 Oct 1998, pp. 238-247.
- 63) *Global QCD Analysis Of Parton Structure Of The Nucleon: CTEQ5 Parton Distributions*, CTEQ Collaboration: H. L. Lai, J. Huston, S. Kuhlmann, J. Morfin, F. Olness, J. F. Owens, J. Pumplin, W. K. Tung, hep-ph/9903282.
Eur. Phys. J. C12: 375-392, (2000).
- 64) *Asymptotic Properties Of DVCS*, B.I. Ermolaev, F. Olness, A.G. Shuvaev.
Nuclear Physics B (Proc. Suppl.) 79, 570 (1999).
- 65) *Heavy Quark Production In DIS And Hadron Colliders*, F.I. Olness. e-Print Archive: hep-ph/9906295
Proceedings of 13th Topical Conference on Hadron Collider Physics, Mumbai, India, 14-20 Jan 1999.
- 66) *Searching For Strongly Interacting Massive Particles (SIMPS)*, R.N. Mohapatra, F. Olness, R. Stroynowski, V.L. Teplitz. hep-ph/9906421.
Phys. Rev. D60: 115013, (1999).
- 67) SIMP (Strongly Interacting Massive Particle) Search. Vigdor L. Teplitz, Rabindra N. Mohapatra, Fred Olness, Ryszard Stroynowski. SMU-HEP-00-05, Dec 1999. Proceedings of International Conference on Orbis Scientiae 1999: Quantum Gravity, Generalized Theory of Gravitation and Superstring Theory Based Unification (28th Conference on High Energy Physics and Cosmology Since 1964), Fort Lauderdale, Florida, 16-19 Dec 1999. e-Print Archive: hep-ph/0002119

- 68) R. Demina, S. Keller, M. Kramer, S. Kretzer, R. Martin, F.I. Olness, R.J. Scalise, D.E. Soper, W.K. Tung, N. Varelas, U.K. Yang. *Heavy quark production and PDF's subgroup report*, hep-ph/0005112. Report of the Heavy Quark subgroup of the Parton Distributions Working Group of the "QCD and Weak Boson Physics workshop in preparation for Run II at the Fermilab Tevatron."
- 69) L.de Barbaro, E.L. Berger, R. Brock, D. Casey, R. Demina, W.T. Giele, R. Hirosky, J. Huston, J. Kalk, S.A. Keller, M. Klasen, D.A. Kosower, M. Kramer, S. Kretzer, S. Kuhlmann, R. Martin, F.I. Olness, T. Plehn, J. Pumplin, R.J. Scalise, H. Schellman, J. Smith, D.E. Soper, G. Sterman, D. Stump, W.K. Tung, N. Varelas, W. Vogelsang, U.K. Yang. *Parton Distributions Working Group*, Jun 2000. e-Print Archive: hep-ph/0006300 Report of the Parton Distributions Working Group of the "QCD and Weak Boson Physics workshop in preparation for Run II at the Fermilab Tevatron."
- 70) SIMP (Strongly Interacting Massive Particle) Search. Vigdor L. Teplitz, Rabindra N. Mohapatra, Fred Olness, Ryszard Stroynowski. Proceedings of 4th International Symposium on Sources and Detection of Dark Matter in the Universe (DM 2000), Marina del Rey, California, 23-25 Feb 2000. hep-ph/000511
- 71) Large-x Parton Distributions. S. Kuhlmann, J. Huston, J. Morfin, F. Olness, J. Pumplin, J.F. Owens, W.K. Tung, J.J. Whitmore. Proceedings of the "Workshop on Nucleon Structure in the High x-Bjorken Region (HiX2000)," Temple University, Philadelphia, Pennsylvania, March 30-April 1, 2000. hep-ph/0007140.
- 72) Parton Densities at High-x S. Kuhlmann, J. Huston, J. Morfin, F. Olness, J. Pumplin, J.F. Owens, W.K. Tung, J.J. Whitmore. Proceedings of 8th International Workshop on Deep Inelastic Scattering and QCD (DIS 2000), Liverpool, England, 25-30 Apr 2000. hep-ph/0007141.
- 73) *Large x Parton Distributions*, S. Kuhlmann, J. Huston, J. Morfin, F. Olness, J. Pumplin, J.F. Owens, W.K. Tung, J.J. Whitmore. Dec 1999. e-Print Archive: hep-ph/9912283
Phys. Lett. B476, 291 (2000).
- 74) *Treatment of Heavy Quarks in Deeply Inelastic Scattering*, M. Krämer, F. Olness, D. Soper. e-Print Archive: hep-ph/0003035
Phys. Rev. D **62**, 096007 (2000).
- 75) *Predictions for Neutrino Structure Functions*, S. Kretzer, F.I. Olness, R.J. Scalise, R.S. Thorne, U.K. Yang. e-Print Archive: hep-ph/0101088. January (2001).
Phys. Rev. D **64**, 033003 (2001).
- 76) "E1 working group summary: Neutrino factories and muon colliders," T. Adams *et al.*, in *Proc. of the APS/DPF/DPB Summer Study on the Future of Particle Physics (Snowmass 2001)*, Published in eConf C010630:E1001,2001. [arXiv:hep-ph/0111030]
- 77) "Differential distributions for NLO neutrino-production of charm," S. Kretzer, D. Mason and F. Olness, in *Proc. of the APS/DPF/DPB Summer Study on the Future of Particle Physics (Snowmass 2001)*, Published in eConf C010630:P507,2001. [arXiv:hep-ph/0112306]

- 78) "PDF's: What do we need to know?," F. Olness, in *Proc. of the APS/DPF/DPB Summer Study on the Future of Particle Physics (Snowmass 2001)* ,
Published in eConf C010630:E502,2001. [arXiv:hep-ph/0112307]
- 79) "Working group on QCD and strong interactions," E. L. Berger *et al.*, in *Proc. of the APS/DPF/DPB Summer Study on the Future of Particle Physics (Snowmass 2001)* ,
Published in eConf C010630:P5001,2001. [arXiv:hep-ph/0201146]
- 80) "Physics at future hadron colliders," U. Baur, R. Brock, J. Parsons, M. Albrow, D. Denisov, T. Han, A. Kotwal, F. Olness, J. Qian, S. Belyaev, *et al.*. In *Proc. of the APS/DPF/DPB Summer Study on the Future of Particle Physics (Snowmass 2001)* ed. R. Davidson and C. Quigg,
Published in eConf C010630:E4001,2001. [arXiv:hep-ph/020122]
- 81) "The QCD/SM working group: Summary report," W. Giele *et al.* Workshop on "Physics at TeV Colliders", Les Houches, France, 21 May - 1 June 2001.
Published in *Les Houches 2001, Physics at TeV colliders*, 275-426. [arXiv:hep-ph/0204316.]
- 82) "Differential distributions for NLO analyses of charged current neutrino-production of charm," S. Kretzer, D. Mason and F. Olness, arXiv:hep-ph/0112191.
Phys. Rev. D **65**, 074010 (2002).
- 83) "Soft and collinear parton radiation in heavy quark production," P. M. Nadolsky, N. Kidonakis, F. Olness and C. P. Yuan. DPF 2002: The Meeting of the Division of Particles and Fields of the American Physical Society, Williamsburg, Virginia, 24-28 May 2002.
arXiv:hep-ph/0207332.
- 84) "Resummation of transverse momentum and mass logarithms in DIS heavy-quark production," P. M. Nadolsky, N. Kidonakis, F. Olness and C. P. Yuan,
arXiv:hep-ph/0210082.
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- 85) "Neutrino Dimuon Data and the Strangeness Content of the Nucleon" F. Olness, J. Pumplin, D. Stump, J. Houston, P. Nadolsky, H.L. Lai, S. Kretzer, J.F. Owens, W. K. Tung.
[Report No. MSU-HEP-030701; BNL-NT-03/17; RBRC-329]
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- 86) "The Parton Structure of the Nucleon and Precision Determination of the Weinberg Angle in Neutrino Scattering" S. Kretzer, F. Olness, J. Pumplin, D. Stump, W. K. Tung and M. H. Reno,
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- 87) "CTEQ6 parton distributions with heavy quark mass effects," S. Kretzer, H. L. Lai, F. I. Olness and W. K. Tung,
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- 88) “Neutrino charm production and implications for PDF’s,” F. Olness. arXiv:hep-ph/0311064.
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- 89) “Neutrino dimuon production and the strangeness asymmetry of the nucleon,” F. Olness, J. Pumplin, D. Stump, J. Huston, P. Nadolsky, H.L. Lai, S. Kretzer, J.F. Owens, W.K. Tung, arXiv:hep-ph/0312323.
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- 90) “The parton structure of the nucleon and precision determination of the Weinberg angle in neutrino scattering,” S. Kretzer, F. Olness, J. Pumplin, D. Stump, W. K. Tung and M. H. Reno, arXiv:hep-ph/0312322.
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- 91) “Resummation for the Tevatron and LHC boson production at small x ,” S. Berge, P. Nadolsky, F. Olness and C. P. Yuan, arXiv:hep-ph/0401128.
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- 92) M. Dobbs *et al.*, “The QCD/SM working group: Summary report,” arXiv:hep-ph/0403100. Contributed to *3’rd Les Houches Workshop: Physics at TeV Colliders*, Les Houches, France, 26 May - 6 Jun 2003.
- 93) E. L. Berger, P. M. Nadolsky, F. I. Olness, and J. Pumplin, “Light gluino constituents of hadrons and a global analysis of hadron scattering data,” [arXiv:hep-ph/0406143.]
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- 94) “Transverse momentum resummation at small x for the Tevatron and LHC,” Stefan Berge, Pavel M. Nadolsky, Fredrick I. Olness, and C.-P. Yuan, [arXiv:hep-ph/0410375]
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- 95) “Heavy quark parton distribution functions,” S. Kretzer and F. I. Olness, Contributed to 13th International Workshop on Deep Inelastic Scattering (DIS 05), Madison, Wisconsin, 27 Apr - 1 May 2005. [arXiv:hep-ph/0508216.]
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- 97) “Off-shell scattering amplitudes in the double-logarithmic approximation,” B. I. Ermolaev, M. Greco, F. Olness and S. I. Troyan, [arXiv:hep-ph/0506309].
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- 98) “Heavy-flavor effects in soft gluon resummation for electroweak boson production at hadron colliders,” S. Berge, P. M. Nadolsky and F. I. Olness, [arXiv:hep-ph/0509023.]
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- 99) “Higgs Production in Association with Heavy Quarks: Issues of QCD Evolution and Mass Thresholds in Variable Flavor Schemes,” B. Field, F. Olness, J. Smith.
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- 100) “Heavy-flavor effects in supersymmetric Higgs boson production at hadron colliders,” A. Belyaev, S. Berge, P. M. Nadolsky, F. Olness and C. P. Yuan. arXiv:hep-ph/0603049.
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- 101) “Les Houches physics at TeV colliders 2005, standard model, QCD, EW, and Higgs working group: Summary report,” C. Buttar *et al.*, arXiv:hep-ph/0604120.
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- 102) “Tevatron-for-LHC Report of the QCD Working Group.” M. Albrow, *et. al.*, *Tevatron-for-LHC Conference Report of the QCD Working Group*.
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- 103) “Tevatron-for-LHC Report: Higgs.” U. Aglietti, *et. al.*, *Tevatron-for-LHC Conference Report of the Higgs Working Group*.
arXiv:hep-ph/0612172
- 104) ”The Impact of new neutrino DIS and Drell-Yan data on large- x parton distributions.” J.F. Owens, J. Huston, C.E. Keppel, S. Kuhlmann, J. Morfin, F. Olness, J. Pumplin, and D. Stump. [arXiv: hep-ph/0702159]
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- 105) “Tevatron-for-LHC Report: Top and Electroweak Physics.” C.E. Gerber, *et. al.*, *Tevatron-for-LHC Conference Report of the Top and Electroweak Working Group*.
arXiv:0705.3251 [hep-ph].
- 106) “Nuclear Corrections and Parton Distribution Functions — Lessons Learned from Global Fitting.” J.F. Owens, J. Huston, C.E. Keppel, S. Kuhlmann, J. Morfin, F. Olness, J. Pumplin, and D. Stump.
Contributed talk (presented by J.F. Owens) to the *Fifth International Workshop on. Neutrino-Nucleus Interactions in the Few-GeV Region*. May 30, 2007 — June 3, 2007. Fermilab, Batavia, Illinois USA.
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- 107) “A Review of Target Mass Corrections.” Ingo Schienbein, Voica A. Radescu, G.P. Zeller, M. Eric Christy, C.E. Keppel, Kevin S. McFarland, W. Melnitchouk, Fredrick Olness, Mary Hall Reno, Fernando Stefens, & Ji-Young Yu. arXiv:0709.1775 [hep-ph].
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- 108) “Nuclear PDFs from neutrino deep inelastic scattering.” I. Schienbein, J. Y. Yu C. Keppel, J. G. Morfin, F. Olness, & J.F. Owens. arXiv:0710.4897 [hep-ph].
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- 109) T. Adams *et al.* [NuSOnG Collaboration], “Expression of Interest for Neutrinos Scattering on Glass: NuSOnG,” *Proposal for a new experimental: Submitted to the Fermilab Program Advisory Council (PAC)*.
arXiv:0907.4864 [hep-ex].
- 110) T. Adams *et al.* [NuSOnG Collaboration], “Terascale Physics Opportunities at a High Statistics, High Energy Neutrino Scattering Experiment: NuSOnG,” arXiv:0803.0354 [hep-ph].
Int. J. Mod. Phys. A **24**, 671 (2009).
- 111) H. Jung *et al.*, “What HERA may provide ?” Contributed to 16th International Workshop on Deep Inelastic Scattering and Related Subjects (DIS 2008), London, England, 7-11 Apr 2008.
arXiv:0809.0549 [hep-ph].
- 112) I. Schienbein, J. Y. Yu, C. Keppel, J. G. Morfin, F. I. Olness and J. F. Owens, “Parton distribution function uncertainties & nuclear corrections for the LHC,” arXiv:0806.0723 [hep-ph].
• Contributed to *43rd Rencontres de Moriond on QCD and Hadronic Interactions*, La Thuile, Italy, 8-15 March 2008.
• Contributed to *16th International Workshop on Deep Inelastic (DIS 2008)*, London, England, 7-11 April 2008.
- 113) F. Olness and I. Schienbein, “Heavy Quarks: Lessons Learned from HERA and Tevatron,” [arXiv:0812.3371 [hep-ph]].
Nucl. Phys. Proc. Suppl. **191**, 44 (2009)
- 114) I. Schienbein, J. Y. Yu, C. Keppel, J. G. Morfin, F. Olness and J. F. Owens, “Nuclear Parton Distribution Functions,” [arXiv:0812.3370 [hep-ph]].
Nucl. Phys. Proc. Suppl. **191**, 25 (2009)
- 115) F. Olness and R. Scalise, “Regularization, Renormalization, and Dimensional Analysis: Dimensional Regularization meets Freshman E&M.” *Based on lectures presented at the CTEQ Summer Schools on QCD Analysis and Phenomenology*.
arXiv:0812.3578 [hep-ph].
- 116) T. Adams *et al.* [NuSOnG Collaboration], “QCD Precision Measurements and Structure Function Extraction at a High Statistics, High Energy Neutrino Scattering Experiment: NuSOnG,”
arXiv:0906.3563 [hep-ex].
- 117) F. I. Olness and D. E. Soper, “Correlated theoretical uncertainties for the one-jet inclusive cross section,”
arXiv:0907.5052 [hep-ph].
- 118) F. Olness and K. Park, “Strange PDF and implications for the LHC.”
In preparation.
- 119) “A Global Analysis of Nuclear PDFs.” I. Schienbein, J. Y. Yu C. Keppel, J. G. Morfin, F. Olness, & J.F. Owens.
In preparation.

Conference & Summer School Presentations:[†]

Arranged in reverse chronological order.

- 2009 CTEQ Summer School: *“Regularization, Renormalization, and Dimensional Analysis: Dimensional Regularization meets Freshman E&M.”* CTEQ Summer School on QCD Analysis and Phenomenology, June 22, 2009, Madison, Wisconsin.
- Les Houches 2009: *PDF issues for the LHC. Les Houches 2009: Physics at TeV Colliders*, June 13, 2009, Les Houches, France.
- Pheno 2009: *Nuclear PDFs. Pheno 2009 Symposium: LHC Alive!* May 12, 2009, Madison, WI.
- LoopFest 2009: *Heavy Quark PDFs. LoopFest VIII: Radiative corrections for the LHC and ILC*, May 9, 2009, Madison, WI.
- Ringberg 2008: *Nuclear Parton Distribution Functions. New Trends in HERA Physics 2008*, October 5-10, 2008, Schloss Ringberg am Tegernsee, Munich, Germany
- Ringberg 2008: *Heavy Quarks, New Trends in HERA Physics 2008*, October 5-10, 2008, Schloss Ringberg am Tegernsee, Munich, Germany
- 2008 CTEQ/MCnet Summer School: *MC for evening discussion sessions. 2008 CTEQ/MCnet Summer School on QCD Analysis and Phenomenology*: 7-17 August 2008, Debrechen Hungary.
- ATLAS Workshop: *W/Z cross section uncertainties and PDF tools. ATLAS Standard Model Meeting & Physics Workshop*: 9-11 June 2008, CERN, Geneva Switzerland.
- HERA4LHC 2008: *W/Z/Higgs Production at LHC & PDF Uncertainties, HERA4LHC Workshop*, 26-30 May 2008, CERN, Geneva Switzerland.
- DIS 2008: *Parton Distribution Function Uncertainties and Nuclear Corrections for the LHC, XVI International Workshop on Deep-Inelastic Scattering and Related Subjects*, 7-11 April 2008, University College London UK.
- Moriond 2008: *Parton Distribution Function Uncertainties and Nuclear Corrections for the LHC, 43rd Rencontres de Moriond: QCD and High Energy Hadronic Interactions*, La Thuile, Italy, March 08-15 2008.
- SMU QuarkNet Program 2007: *Organized Workshop and lectured*, Particle Physics Workshop for 20 High School teachers. [/www.physics.smu.edu/~olness/qnet](http://www.physics.smu.edu/~olness/qnet) SMU, Dallas, TX, 4-8 June 2007.
- ScienceFEST 2006 *Symmetries of Physics & Music*. Hosted by the Winston School At UT-Southwestern. 9 November 2006.
- Taos Cultural Institute **The Secret City: Los Alamos and the Atomic Age**: In collaboration

[†] Published presentations are listed in the publications list.

with Prof. James Hopkins (History). Taos, NM. 20-23 July 2006.

- SMU QuarkNet Program 2006: *Organized Workshop and lectured*, Particle Physics Workshop for 20 High School teachers. /www.physics.smu.edu/~olness/qnet SMU, Dallas, TX, 5-9 June 2006.
- PHENO 2006 Symposium: *W/Z/Higgs Production at LHC & PDF Uncertainties*, 15-17 May 2006, Madison, Wisconsin
- JLab Neutrino Workshop 2006: *Structure functions and Form Factors: Overview from CTEQ*, Workshop on Intersections of Nuclear Physics with Neutrinos and Electrons May 4-5, 2006. Jefferson Lab, Newport News, VA
- 2006 APS April Meeting: *W/Z/Higgs Production at LHC & PDF Uncertainties*, April 22-25, 2006. Dallas, Texas.
- 2005 CTEQ Summer School on QCD Analysis and Phenomenology: *Heavy Quark Production*, 19-27 May 2005, Puebla, Mexico.
- SMU QuarkNet Program 2005: *Organized Workshop and lectured*, Particle Physics Workshop for 14 High School teachers. /www.physics.smu.edu/~olness/qnet SMU, Dallas, TX, 6-10 June 2005.
- Les Houches 2005: *Heavy quark production at the LHC*. Les Houches Workshop 2005: Physics at TeV Colliders 2-20 May 2005, Les Houches, France.
- DIS 2005 Workshop: *Transverse momentum resummation at small x*, April 27 - May 1, 2005, Madison, Wisconsin.
- DIS 2005 Workshop: *CTEQ heavy quark parton distribution functions*, April 27 - May 1, 2005, Madison, Wisconsin.
- First North American ATLAS Physics Workshop *W/Z/Higgs Production and PDF Uncertainties*, 19-21 December 2004, University of Arizona, Tucson, AZ
- 2004 TSAPS/AAPT/SPS Joint Fall Meeting *Light gluino constituents of hadrons and a global analysis of hadron scattering data*, 7-9 October 2004, Baylor University, Waco, TX.
- 2004 CTEQ Summer School on QCD Analysis and Phenomenology: *Drell-Yan Production (2 lectures)*, 22-30 June 2004, Madison, WI.
- SMU QuarkNet Program 2004: *Organized Workshop and lectured*, Particle Physics Workshop for 12 High School teachers. /www.physics.smu.edu/~olness/qnet SMU, Dallas, TX, 7-11 June 2004.
- The Future of QCD at the Tevatron *Discussion session: Physics Issues at the Tevatron*, May 20-22, 2004, Fermilab, Batavia, IL
- PHENO 2004 Symposium: *Neutrino Production of Charm and the Strange Quark PDF*, 26-28 Apr 2004, Madison, Wisconsin

- SMU QuarkNet Program 2003: *Organized Workshop and lectured*, Particle Physics Workshop for 12 High School teachers. /www.physics.smu.edu/~olness/qnet SMU, Dallas, TX, 9-13 June 2003.
- 2003 CTEQ/IFAE Summer School on QCD Analysis and Phenomenology: *Drell-Yan Production* (2 lectures), *Computational Methods* (1 lecture), Sant Feliu de Guixols, Catalonia, Spain, 22 - 30 May 2003
- Loopfest II: *Resummation of Transverse Mumentum and Mass Logarithms for Heavy Quarks*, Brookhaven National Laboratory, Upton, NY, May 14-16, 2003
- DIS 2003: *Charm production and implications for $s(x)$ and $s\text{-bar}(x)$ from NuTeV data*: Invited talk at 11th International Workshop On Deep Inelastic Scattering (DIS 2003) 23-27 Apr 2003, St. Petersburg, Russia.
- Arlington Linear Collider Workshop 2003: *Sudakov Resummation for Massive Particles*, The University of Texas at Arlington January 9-11, 2003.
- SMU QuarkNet Program 2002: *Organized Workshop and lectured*, Particle Physics Workshop for 15 High School teachers. /www.physics.smu.edu/~olness/qnet SMU, Dallas, TX, 11-14 June 2002.
- 2002 CTEQ Summer School on QCD Analysis and Phenomenology: *Charm and Bottom Quark Production*, 2 - 10 June 2002, Madison, WI.
- DPF 2002: *Differential Distributions for NLO Neutrino-Production of Charm*, 24-28 May 2002, Williamsburg, Virginia
- PHENO 2002 Symposium: *Neutrino production of charm quarks*, 22-24 Apr 2002, Madison, Wisconsin
- SMU QuarkNet Program: *DOE/NSF Review of the QuarkNet Project*, National Science Foundation, Arlington, VA. 13-14 December 2001.
- North Texas Graduate Programs in Physics Workshop *Physics for the 21st Century: A Historical Perspective*. University of Texas at Dallas. November 3, 2001.
- Texas APS Meeting: *Dimensional Regularization Meets Freshman E&M*, October 4 - 6, 2001, Texas Christian University, Fort Worth, Texas
- Snowmass 2001: *PDF's: What Do We Need To Know?* Snowmass 2001 Workshop. Presentation to E5: Fixed-Target Experiments. Snowmass, CO, 30 June - 21 June 2001.
- Snowmass 2001: *Benchmark Processes for Future Colliders*. Snowmass 2001 Workshop. Presentation to E4: Hadron Benchmarks Working Group. Snowmass, CO, 30 June - 21 June 2001.
- Snowmass 2001: . *Structure Functions at a Neutrino Factory* Snowmass 2001 Workshop. Presentation to E1 Working Group: Neutrino Factories and Muon Colliders Snowmass, CO, 30 June - 21 June 2001.
- Snowmass 2001: . *Heavy quark production at future colliders* Snowmass 2001 Workshop. Presentation to P5-A: Parton Distributions, Spin and Resummation Sub-Group. Snowmass, CO, 30 June - 21 June 2001.
- SMU QuarkNet Program 2001: *Organized Workshop and lectured*, Particle Physics Workshop for 18

- High School teachers. /www.physics.smu.edu/~olness/qnet SMU, Dallas, TX, 4-15 June 2001.
- Les Houches 2001: *Heavy quark production at future colliders*. Les Houches Workshop 2001: Physics at TeV Colliders 21 May - 1 June, 2001, Les Houches, France.
 - Retro/Exotic Neutrino Interactions Working Group Meeting.: *The Driving Physics Behind the Proton Physics Driver* Fermilab, Batavia, IL. 19 April 2001.
 - SPS Regional Meeting: Banquet Keynote speaker. *Physics for the 21st Century: A Historical Perspective*. SPS Zone 8 Regional Meeting, November 10-11, 2000, University of Louisville, Louisville, KY.
 - HiX2000 *Large-x Parton Distributions*: Invited talk presented at the “Workshop on Nucleon Structure in the High x -Bjorken Region (HiX2000),” Temple University, Philadelphia, Pennsylvania, March 30-April 1, 2000.
 - DIS 2000 *Parton Densities at High-x*: Invited talk at 8th International Workshop on Deep Inelastic Scattering and QCD (DIS 2000), Liverpool, England, 25-30 Apr 2000.
 - 2000 CTEQ Summer School on QCD Analysis and Phenomenology: *Dimensional Regularization Meets Freshman E&M*, 30 May - 7 Jun 2000 , Lake Geneva, WI.
 - B Physics Run II Workshop: *b-quark production at Run II*, Workshop on B Physics at the Tevatron Run II and Beyond. Fermilab, 24-26 February, 2000.
 - QCD and Weak Boson Run II Workshop: *PDF's and Heavy Quark Issues*, Physics at Run II Workshops: QCD and Weak Boson Physics. Fermilab, November 4-6, 1999.
 - QCD and Weak Boson Run II Workshop: *PDF's and Heavy Quark Issues*, Physics at Run II Workshops: QCD and Weak Boson Physics. Fermilab, June 3-4, 1999.
 - DIS'99 Workshop *Asymptotic Properties Of DVCS*: 7th International Workshop on Deep Inelastic Scattering and QCD (DIS 99), Zeuthen, Germany, 19-23 Apr 1999.
 - Pheno'99 Symposium *DIS Heavy Quark Production*: International Symposium On Phenomenology For The 3rd Millennium 14-17 April 1999, Madison, WI.
 - 13th Hadron Colliders: *Heavy Quark Production In DIS And Hadron Colliders*: 13th Hadron Collider Physics Conference, Mumbai, India, 14-20 January, 1999.
 - HQ'98: *Heavy Quark Production Issues*, Workshop on Heavy Quarks at Fixed Target, Fermilab, October 10-12, 1998.
 - CLATE' 98: *Mathematica for Physics*, Latin-American Congress on Educational Technologies: San Nicolás - Buenos Aires - Argentina. August 9 - 15 , 1998. Facultad Regional San Nicolás de la Universidad Tecnológica Nacional.
 - Tevatron University, Fermilab: *Dimensional Regularization Meets Freshman E&M*, Fermilab, July 23, 1998.
 - 1998 CTEQ Summer School on QCD Analysis and Phenomenology: *Dimensional Regularization Meets*

Freshman E&M, Courmayeur, Aosta Valley, Italy. 8-16 July 1998.

- DIS'98 Conference: *Study Of The Uncertainty Of The Gluon Distribution*, 6th International Workshop on DIS and QCD, Brussels, Belgium, 4-8 Apr 1998.
- DIS'98 Conference: *Theoretical Description Of Heavy Quark Production In DIS*, 6th International Workshop on DIS and QCD, Brussels, Belgium, 4-8 Apr 1998.
- Pheno-CTEQ Symposium 1998: *Heavy Quark Production in QCD*, The Pheno-CTEQ Symposium 1998 - Frontiers of Phenomenology: From Non-Perturbative QCD to New Physics. 23 - 26 March 1998; Madison Wisconsin.
- 1997 CTEQ Summer School on QCD Analysis and Phenomenology: *Dimensional Regularization Meets Freshman E&M*, 27 May - 4 Jun 1997, Lake Geneva, WI.
- DIS'97: *Heavy Quark Parton Distributions: Mass Dependent Or Mass Independent Evolution?* 5th International Workshop On Deep Inelastic Scattering And QCD (DIS 97). 14-18 Apr 1997, Chicago, IL.
- Pheno'97: *Resummation in QCD*. International Conference On Recent Developments In Phenomenology (Pheno 97). 17-19 Mar 1997, Madison, WI.
- VLHC Workshop: *PDF's for the VLHC*. VLHC Physics And Detector Workshop: Beyond The LHC. 13-15 Mar 1997, Batavia, IL.
- 1997 Aspen Winter Workshop: *Review: The State of PDF's*. Aspen Winter Conference On Particle Physics: Particle Physics Enters Its Second Century. 19-25 Jan. 1997, Aspen, Colorado.
- Texas Section of the APS: *What's so special about resummation: DGLAP, BFKL, Sudakov, and all that!* University of Texas at Arlington, 10-12 October 1996.
- 1996 Snowmass Workshop: *Structure Functions Subgroup Report*. Plenary report for workshop review, New Directions for High Energy Physics, June 25-July 12, 1996, Snowmass, Colorado.
- CTEQ/DESY Summer School on QCD Analysis and Phenomenology: *Deeply Inelastic Scattering and Sum Rules*, Bad Lauterberg, Germany, 17-25 July 1995.
- Dubna, JINR: Five Lecture Mini-Course *Introduction to Deeply Inelastic Scattering*, Joint Institute for Nuclear Research (JINR) Dubna, Moscow Region, Russia, April 3-15, 1995.
- Moriond 1995: *Leptoproduction of Heavy Quarks, 30th Rencontres de Moriond: QCD and High Energy Hadronic Interactions*, Meribel les Allues, France, 19-25 Mar 1995.
- DØ1995: *Unsolved Puzzles in QCD*, DØ Collaboration QCD Workshop 1995, Tucson, AZ, January 9-13 1995.

Presentations prior to 1995 are available upon request

Seminar, Colloquium, and Public Lectures

Arranged in reverse chronological order.

- FERMILAB JOINT EXPERIMENTAL-THEORETICAL SEMINAR: *QCD Puzzles, Predictions, and Prognosis: What can ν do for you?* October 9, 2009. Fermilab, Batavia, IL.
- IIT SEMINAR: *QCD Puzzles, Predictions, and Prognosis: What can ν do for you?* October 8, 2009. IIT, Chicago, IL
- TEXAS TECH UNIVERSITY: Colloquium *How Strange is the Proton? A collection of interesting puzzles for the LHC*, September 17, 2009.
- DUKE UNIVERSITY: Theory Seminar *Are we ready to make discoveries at the LHC? W/Z/Higgs Production at the LHC & PDF Uncertainties*, March 16, 2009.
- HIGHLAND PARK HIGH SCHOOL: Honor Society Keynote Presentation: *From Imagination to Discovery: The Large Hadron Collider Project*, 20 October 2008.
- KANSAS UNIVERSITY: Theory Seminar *What can you do with Precision PDFs???* *W/Z/Higgs production at the LHC and PDF Uncertainties*, 30 September 2008.
- KANSAS UNIVERSITY: Colloquium *How Strange is the Proton? A collection of interesting puzzles for the LHC*, 29 September 2008.
- CERN: Seminar: Theoretical Phenomenology Club. *Variable Flavor Number Schemes for Heavy Quarks*, 15 May 2008.
- CERN: Seminar: Theoretical Neutrino Coffee Seminar. *NuSONG: Terascale Physics Opportunities at a High Statistics, High Energy Neutrino Scattering Experiment*, 29 April 2008.
- UNIVERSITY OF GRANADA: Theory Seminar: *Drell-Yan Production & Resummation*, 2 April 2008.
- UNIVERSITY OF GRANADA: Theory Seminar: *Heavy Quark Production*, 3 April 2008.
- AACHEN: Theory Seminar: *W/Z/Higgs Production at LHC and PDF Uncertainties*, 7 February 2008.
- DESY: Joint H1/ZEUS Seminar: *W/Z/Higgs Production at LHC and PDF Uncertainties*, 25 January 2008.
- U. OF PITTSBURTH: Seminar: *W/Z/Higgs Production at LHC & PDF Uncertainties*, 4 August, 2006
- CERN: Theory Seminar: *W/Z/Higgs Production at LHC & PDF Uncertainties*, 24 February 2006.
- UNIVERSITY OF OKLAHOMA: Colloquium: *How Strange is the Proton? A collection of interesting puzzles*, 2 February 2006.
- UNIVERSITY OF OKLAHOMA: Seminar: *W/Z/Higgs Production at LHC & PDF Uncertainties*, 2 February 2006.

- LOS ALAMOS NATIONAL LABORATORY: P-25 Seminar: *Neutrino DIS and strange quark PDF asymmetry*, 7 Sept. 2005
- BROOKHAVEN NATIONAL LABORATORY, PARTICLE PHYSICS SEMINAR:: *Applied Mathematica*, 21 July 2005.
- BROOKHAVEN NATIONAL LABORATORY, RHIC SPIN COLLABORATION:: *Lessons from Unpolarized PDF's*, 19 July 2005.
- BAYLOR UNIVERSITY: Colloquium: *How Strange is the Proton? A collection of interesting puzzles*, 28 January 2005.
- OKLAHOMA STATE UNIVERSITY: Colloquium: *How Strange is the Proton? A collection of interesting puzzles*, 30 September 2004.
- OKLAHOMA STATE UNIVERSITY: Seminar: *Dual Resummation of q_T and mass logarithms*, 30 September 2004.
- WYLIE HIGH SCHOOL: QuarkNet School Presentation: *Strings & Things: What's it all about?*, 21 September 2004.
- INDIANA UNIVERSITY: *Neutrino Production of Charm and the Strange Quark PDF*, 30 April 2004.
- SMU PUBLIC LECTURE: *From Imagination to Discovery*., 7 December 2003.
- NORTH TEXAS GRADUATE PROGRAMS IN PHYSICS WORKSHOP: *Physics for the 21st Century: A Historical Perspective*. University of Texas at Dallas, Richardson, TX. November 3, 2001.
- UNIVERSITY OF TEXAS–DALLAS: *How Strange is a Proton: Puzzles and Challenges for the 3rd Millennium*, March 22, 2000.
- FLORIDA STATE UNIVERSITY: *Heavy Quarks at the Tevatron Run II*, December 7, 1999.
- NUTEV GROUP MEETING:: *Heavy Quark Production in DIS*, June 5, 1999.
- BROOKHAVEN NATIONAL LABORATORY HIGH ENERGY PHYSICS SEMINAR:: *Heavy Quark Production in QCD*, May 27, 1998.
- ARGONNE NATIONAL LABORATORY HIGH ENERGY PHYSICS SEMINAR:: *Heavy Quark Production in QCD*, Mar. 11, 1998.
- NORTHWESTERN UNIVERSITY HIGH ENERGY PHYSICS SEMINAR:: *Heavy Quark Production in QCD*, Mar. 9, 1998.
- UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN HIGH ENERGY PHYSICS SEMINAR:: *Heavy Quark Production in QCD*, Feb. 23, 1998.
- PENN STATE UNIVERSITY HIGH ENERGY PHYSICS SEMINAR:: *Heavy Quark Production in QCD*, Feb. 17, 1998.
- $D\bar{0}$ B-PHYSICS GROUP MEETING:: Informal presentation of *Heavy Quark Production in QCD*, Feb. 12, 1998.

- ILLINOIS INSTITUTE OF TECHNOLOGY PHYSICS COLLOQUIUM:: *How Strange is the Proton: Heavy Quark Production in QCD*, Jan. 29, 1998.
- INDIANA UNIVERSITY HIGH ENERGY PHYSICS SEMINAR:: *Heavy Quark Production in QCD*, Jan. 26, 1998.
- MICHIGAN STATE UNIVERSITY THEORY SEMINAR:: *Heavy Quark Production in QCD*, Jan. 7, 1998.
- FERMILAB THEORY SEMINAR:: *Heavy Quark Production*, November 20, 1997.
- UT-ARLINGTON PHYSICS COLLOQUIUM:: *How Strange is the Proton? Heavy Quark Production in Deeply Inelastic Scattering*, October 4, 1995.
- EUROPEAN LABORATORY FOR PARTICLE PHYSICS (CERN) THEORY SEMINAR:: *Leptoproduction of Heavy Quarks*, CERN, Geneva, Switzerland, May 5, 1995.
- INSTITUTE FOR THEORETICAL AND EXPERIMENTAL PHYSICS (ITEP) THEORY SEMINAR:: *Leptoproduction of Heavy Quarks*, Moscow, Russia, April 26, 1995.
- ST. PETERSBURG NUCLEAR PHYSICS INSTITUTE (NPI) THEORY SEMINAR:: *Leptoproduction of Heavy Quarks*, St. Petersburg, Russia, April 19, 1995.
- DESY THEORY SEMINAR:: *Leptoproduction of Heavy Quarks*, Deutsches Elektronen Synchrotron (DESY), Hamburg, Germany, March 29, 1995.
- THE UNIVERSITY OF TEXAS–AUSTIN THEORY SEMINAR:: *Tests of QCD at Electron Proton Colliders: Semi-Inclusive Deep Inelastic Scattering*, 25 April, 1994.
- DUKE UNIVERSITY SEMINAR:: *A Unified QCD Formulation of Heavy Quark Production*, 8 November, 1993.
- COLUMBIA UNIVERSITY PHYSICS SEMINAR:: *A Unified QCD Formulation of Heavy Quark Production*, 12 March, 1993.
- BROOKHAVEN NATIONAL LABORATORY THEORY SEMINAR:: *A Unified QCD Formulation of Heavy Quark Production*, 17 March, 1993.
- THE UNIVERSITY OF TEXAS–AUSTIN THEORY SEMINAR:: *A Unified QCD Formulation of Heavy Quark Production*, 25 January, 1993.
- GEM COLLABORATION PHYSICS SEMINAR:: *Parton distributions and their effects on Monte Carlo results - problems and fallacies*, SSC Laboratory, Dallas, TX, 1 April, 1992.
- MICHIGAN STATE UNIVERSITY SEMINAR: *How strange is the proton? (Charm production in Deeply-Inelastic Scattering)*, March 12, 1992.
- SSC SYMPOSIUM AT SMU:: *What we know, and what we need to know about the Standard Model?* November 12, 1991.
- SSC LABORATORY COLLOQUIUM:: *What is Really Inside a Proton?* October 31, 1991.

- OREGON STATE UNIVERSITY COLLOQUIUM:: *What is really inside a Proton? The Quantum Chromodynamic Parton Model and Higher Order Corrections*, April 18, 1991.
- STANFORD LINEAR ACCELERATOR CENTER THEORY SEMINAR:: *The Quantum Chromodynamic Parton Model and Higher Order Corrections*, March 20, 1991.
- SOUTHERN METHODIST UNIVERSITY COLLOQUIUM:: *What is really inside a Proton? The Quantum Chromodynamic Parton Model and Higher Order Corrections*, March 5, 1991.
- UNIVERSITY OF TEXAS–AUSTIN SEMINAR:: *The Quantum Chromodynamic Parton Model and Higher Order Corrections* , March 4, 1991.
- FLORIDA STATE UNIVERSITY SEMINAR:: *Tests of QCD at Electron Proton Colliders: Semi-Inclusive Deep Inelastic Scattering*, January 27, 1991.
- LAWRENCE BERKLEY 4-D LUNCH SEMINAR:: *The Quantum Chromodynamic Parton Model and Higher Order Corrections*, January 17, 1991.
- ARGONNE NATIONAL LABORATORY SEMINAR:: *Tests of QCD at Electron Proton Colliders: Semi-Inclusive Deep Inelastic Scattering*, January 7, 1991.

A listing of Seminar and Colloquium Presentations prior to 1991 is available upon request.