

Biographical Sketch for Dr. Sebastian Kuhn ^{*)}

(a) Education and Training

University of Bonn, Germany	Nuclear Physics	Diploma (M.S.) 1982
University of Bonn, Germany	Nuclear Physics	Dr. rer. nat (Ph.D.) 1986
Lawrence Berkeley Lab, USA	Nuclear Physics	NATO fellow 1986-1988

(b) Research and Professional Experience

Old Dominion University	Eminent Scholar	2007 -
Old Dominion University	Professor of Physics	2003 -
Old Dominion University	Assoc. Prof. of Physics	1997 - 2003
Old Dominion University	Asst. Prof. of Physics	1992 - 1997
Stanford University	Acting Asst. Prof.	1988-1992

(c) Publications

C.D. Keith, M. Anghinolfi, M. Battaglieri, D. Branford, S. Bültmann, V.D. Burkert, S.A. Comer, D.G. Crabb, R. Devita, G. Dodge, R. Fatemi, D. Kashy, S.E. Kuhn, Y. Prok, M. Ripani, M.L. Seely, M. Taiuti, and S. Witherspoon: “A Polarized Target for the CLAS Detector”, Nucl. Instr. Meth. A **501**, 327-339 (May 2003).

B.A. Mecking et al. (CLAS collaboration, see Ref. [20]): “The CEBAF Large Acceptance Spectrometer (CLAS)”, Nucl. Instr. Meth A **503**, 513 (May 2003).

A. Deur, P. Bosted, V. Burkert, G. Cates, J.-P. Chen, Seonho Choi, D. Crabb, C. W. de Jager, R. De Vita, G. E. Dodge, R. Fatemi, T. A. Forest, F. Garibaldi, R. Gilman, E. W. Hughes, X. Jiang, W. Korsch, S. E. Kuhn, W. Melnitchouk, Z.-E. Meziani, R. Minehart, A. V. Skabelin, K. Slifer, M. Taiuti, and J. Yun: “Experimental Determination of the Evolution of the Bjorken Integral at Low Q^2 ”, Phys. Rev. Lett. **93**, 212001 (November 2004).

K.V. Dharmawardane, S.E. Kuhn, et al. (CLAS collaboration, see Ref. [11]): “Measurement of the x- and Q^2 -dependence of the asymmetry A_1 on the nucleon”, Phys. Lett. **B641**, 11 (September 2006).

S.E. Kuhn, J.-P. Chen and E. Leader: “Spin structure of the nucleon – status and recent results”, Prog. Part. Nucl. Phys. **63**, 1-50 (July 2009).

L. M. Qin, B. A. Raue, G. E. Dodge, C. E. Hyde-Wright, A. Klein, S. E. Kuhn, T. D. Pyron, K. G. Vansyoc, L. B. Weinstein, J. Yun, M. D. Mestayer: “Prototype studies and design considerations for the CLAS Region 2 drift chambers”, Nucl. Instr. Meth. **A411**, nos. 2,3, pp. 265–274 (August 1998).

M.M. Sargsian, J. Arrington, W. Bertozzi, W. Boeglin, C. Carlson, D. Day, L. Frankfurt, K. Egiyan, R. Ent, S. Gilad, K. Griffioen, D.W. Higinbotham, S. Kuhn, W. Melnitchouk, G.A. Miller, E. Piasetzky, S. Stepanyan, M. Strikman, and L. Weinstein: “Hadrons in the Nuclear Medium”, J. Phys. G.: Nucl. Part. Phys. **29**, R1 (March 2003).

^{*)} Fellow of the APS, 2007

M. Osipenko, S. Simula, W. Melnitchouk, P. Bosted, V. Burkert, E. Christy, K. Griffioen, C. Keppel, S. Kuhn, and G. Ricco:” Global analysis of data on the proton structure function g_1 and the extraction of its moments”, Phys Rev. D **71**, 054007 (March 2005).

P.E. Bosted, K.V. Dharmawardane, G.E. Dodge, T.A. Forest, S.E. Kuhn, Y. Prok, et al. (CLAS collaboration – see Ref. [12]): “Quark-hadron duality in spin structure functions $g(1)_p$ and $g(1)_d$ ”, Phys. Rev. C **75**, 035203 (March 2007).

Y. Prok, P. Bosted, V.D. Burkert, A. Deur, K.V. Dharmawardane, G.E. Dodge, K.A. Griffioen, S.E. Kuhn, R. Minehart, G. Adams., et al. (CLAS collaboration – see Ref. [13]): “Moments of the spin structure functions g_{1p} and g_{1d} for $0.05 < Q^2 < 3.0 \text{ GeV}^2$ ”, Physics Letters B **672**, 12-16 (9 February 2009).

(d) Synergistic Activities

Involved several undergraduate students in my research, including detector development and testing. Supervised Senior Thesis project of undergraduate ODU student Peter Bradshaw.

Worked with a high school teacher as part of the 1999 RECET program to upgrade the Undergraduate Physics Labs at Old Dominion.

Led an 8-week research project for a high school student in the framework of the NASA Sharp Plus Program, involving a cosmic ray telescope. Involved several other high school students in my research (including 6 African-Americans).

Participated in science fairs, open houses, children’s festivals, and other outreach activities; lectured to high school classes; wrote articles popularizing research for general circulation newspapers.

(e) Collaborators and other Affiliations

- (i) All collaborators are listed as authors in the publication list. Main collaborators over past 4 years: Harut Avakian, Peter Bosted, Volker Burkert, Jian-Ping Chen, Alexandre Deur, Howard Fenker (Jefferson Lab), E. Christy and Thia Keppel (Hampton Univ.), Elliot Leader (Imperial College, London), Keith Griffioen (College of William and Mary), Ralph Minehart (Univ. of Virginia), Claudio Ciofi degli Atti (Univ. of Perugia, Italy).
- (ii) Graduate Advisor: Prof. Frank Hinterberger, University of Bonn. Post-graduate advisor: Prof. Henry Weller, Duke University
- (iii) Graduate Students advised: Dr. Frank Wesselmann; Dr. Junho Yun; Dr. Alexei Klimenko, Dr. V. Dharmawardane, Nevzat Guler, Svjatoslav Tkachenko, Jixie Zhang, Krishna Adhikari. Postdocs advised: Dr. Brian Raue (Florida International Univ.); Dr. Tony Forest (Idaho State Univ.)