

ELIZABETH J. BEISE

(a) Professional Preparation:

Carleton College, Northfield, MN,	Physics	B.A. (<i>cum laude</i>), 1981
Massachusetts Institute of Technology	Physics	Ph.D., 1988
California Institute of Technology	Nuclear Physics	1988-93

(b) Appointments:

2002-	Professor, Department of Physics, University of Maryland
1997-2002	Associate Professor, Department of Physics, University of Maryland
1993-97	Assistant Professor, Department of Physics, University of Maryland

(c) Publications:

(i) Selected Recent Publications (of 42 publications in refereed journals):

1. Measurement of the vector analyzing power in elastic electron-proton scattering as a probe of the double virtual Compton amplitude, S. P. Wells, T. Averett, D. Barkhuff, D. H. Beck, E. J. Beise, C. Benson, H. Breuer, R. Carr, S. Covrig, J. DelCorso, G. Dodson, C. Eppstein, M. Farkhondeh, B. W. Filippone, T. A. Forest, P. Frasier, R. Hasty, T. M. Ito, C. Jones, W. Korsch, S. Kowalski, P. Lee, E. Maneva, K. McCarty, R. D. McKeown, J. Mikell, B. Mueller, P. Naik, M. L. Pitt, J. Ritter, V. Savu, D. T. Spayde, M. Sullivan, R. Tieulent, E. Tsentalovich, B. Yang, and T. Zwart, Phys. Rev. C **63**, 064001 (2001).
2. Separation of the longitudinal and transverse cross sections in the $p(e, e' K^+) \Lambda$ and $p(e, e' K^+) \Sigma^0$ reactions, R. M. Mohring *et al.*, Phys. Rev. C **67**, 055205 (2003). (*see publication list*)
3. Parity-violating electron deuteron scattering and the proton's neutral weak axial vector form factor, T. M. Ito *et al.*, Phys. Rev. Lett. **92**, 102003 (2004). (*see publication list*)
4. The strange quark contribution to the proton's magnetic moment, D. T. Spayde, T. Averett, D. Barkhuff, D. H. Beck, E. J. Beise, H. Breuer, R. Carr, S. Covrig, G. Dodson, K. Dow, M. Farkhondeh, B. W. Filippone, W. Franklin, R. Hasty, T. M. Ito, W. Korsch, S. Kowalski, R. D. McKeown, B. Mueller, M. L. Pitt, M. J. Ramsey-Musolf, J. Ritter, R. Tieulent, E. Tsentalovich, S.P. Wells, B. Yang, T. Zwart, Phys. Lett. **B583**, 79 (2004).
5. The SAMPLE experiment and weak nucleon structure, E. J. Beise, M. L. Pitt, and D. T. Spayde, accepted for publication in Progress in Particle and Nuclear Physics, 2005 (invited).

(ii) Additional Significant Publications:

1. Intermediate-energy semileptonic probes of the hadronic neutral current, M. J. Musolf, T. W. Donnelly, J. Dubach, S. J. Pollock, S. Kowalski, and E. J. Beise, Physics Reports **239**, 1 (1994).
2. A high power liquid hydrogen target for parity violation experiments, E. J. Beise, D. H. Beck, E. Candell, R. Carr, F. Duncan, T. Forest, W. Korsch, J. W. Mark, R. D. McKeown, B. A. Mueller, M. Pitt, and S. Wells, Nucl. Instrum. Methods **A378**, 383 (1996).
3. A precise measurement of the deuteron elastic structure function $A(Q^2)$, D. Abbott, A. Ahmidouch, H. Anklin, J. Arvieux, J. Ball, S. Beedoe, E.J. Beise, L. Bimbot, W. Boeglin, H. Breuer, R. Carlini, N.S. Chant, S. Danagoulian, K. Dow, J.-E. Ducret, J. Dunne, R. Ent, L.

Ewell, L. Eyraud, C. Furget, M. Garçon, R. Gilman, C. Glashausser, P. Gueye, K. Gustafsson, K. Hafidi, A. Honegger, J. Jourdan, S. Kox, G. Kumbartzki, L. Lu, A. Lung, D. Mack, P. Markowitz, J. McIntyre, D. Meekins, F. Merchez, J. Mitchell, R. Mohring, S. Mtingwa, H. Mrktchyan, D. Pitz, L. Qin, R. Ransome, J.-S. Real, P.G. Roos, P. Rutt, R. Sawafta, S. Stepanyan, R. Tieulent, E. Tomasi-Gustafsson, W. Turchinets, K. Vansyoc, J. Volmer, E. Voutier, W. Vulcan, C. Williamson, S.A. Wood, C. Yan, J. Zhao, and W. Zhao, *Phys. Rev. Lett.* **82**, 1379 (1999).

4. Measurement of tensor polarization in elastic electron-deuteron scattering at large momentum transfer, D. Abbott, A. Ahmidouch, H. Anklin, J. Arvieux, J. Ball, S. Beedoe, E. J. Beise, L. Bimbot, W. Boeglin, H. Breuer, R. Carlini, N. S. Chant, S. Danagouliau, K. Dow, J.-E. Ducret, J. Dunne, R. Ent, L. Ewell, L. Eyraud, C. Furget, M. Garçon, R. Gilman, C. Glashausser, P. Gueye, K. Gustafsson, K. Hafidi, A. Honegger, J. Jourdan, S. Kox, G. Kumbartzki, L. Lu, A. Lung, D. Mack, P. Markowitz, J. McIntyre, D. Meekins, F. Merchez, J. Mitchell, R. Mohring, S. Mtingwa, H. Mrktchyan, D. Pitz, L. Qin, R. Ransome, J.-S. Réal, P. G. Roos, P. Rutt, R. Sawafta, S. Stepanyan, R. Tieulent, E. Tomasi-Gustafsson, W. Turchinets, K. Vansyoc, J. Volmer, E. Voutier, W. Vulcan, C. Williamson, S. A. Wood, C. Yan, J. Zhao, and W. Zhao, *Phys. Rev. Lett.* **84**, 5053 (2000).
5. Parity violation in elastic electron-proton scattering and the proton's strange magnetic form factor, D. T. Spayde, T. Averett, D. Barkhuff, D. H. Beck, E. J. Beise, C. Benson, H. Breuer, R. Carr, S. Covrig, J. DelCorso, G. Dodson, K. Dow, C. Eppstein, M. Farkhondeh, B. W. Filippone, P. Frazier, R. Hasty, T. M. Ito, C. E. Jones, W. Korsch, S. Kowalski, P. Lee, E. Maneva, K. McCarty, R. D. McKeown, J. Mikell, B. Mueller, P. Naik, M. Pitt, J. Ritter, V. Savu, M. Sullivan, R. Tieulent, E. Tsentalovich, S. P. Wells, B. Yang, and T. Zwart, *Phys. Rev. Lett.* **84**, 1106 (2000).

(d) Synergistic Activities (since 2001):

Member, Nuclear Science Advisory Committee, 1999-2002

Organizer of the U Md Physics Dept. Open Houses for high school students (2000-2003)

Judge for physics projects for U Md summer program for middle school girls, 2004

Mentor for 5 female undergraduate physics students and 1 high school student

Recent Division of Nuclear Physics Committees: (Program, Summer School, Nominations)

(e) Dissertation Advisor: Robert P. Redwine, M.I.T

Postdoctoral Advisor: Robert McKeown, Caltech

Advisees: R. Mohring, K. Gustafsson, D. T. Spayde, J. Liu, T. Horn