Address: Department of Physics

Monmouth College 700 E. Broadway Monmouth, IL 61462

Office phone: (309) 457 - 2387 Home phone: (309) 734 - 5884 Cell phone: (309) 337 - 4257

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Education

Ph. D. in Physics University of Chicago, 1989

M. S. in Physics University of Chicago, 1987

B. S. in Physics University of Notre Dame, 1983

Academic Awards

University of Notre Dame: B.S. cum laude in Physics.

University of Chicago: Gregor Wentzel Prize for excellence as a teaching assistant. Monmouth College: Endowed Chair -- Martha S. Pattee Professor of Science Awarded

Fall 2003

Monmouth College: Hatch Service Award 2008

Teaching Experience

August 2007-Present: Professor of Physics

Department of Physics Monmouth College Monmouth, IL 61462

May 2001 – August 2007: Associate Professor of Physics

Department of Physics Monmouth College Monmouth, IL 61462

August 1998 - May 2001: Assistant Professor of Physics

Department of Physics Monmouth College Monmouth, IL 61462

August 1992 - July 1998: Assistant Professor of Physics

Department of Chemistry, Physics and

Mathematics

Francis Marion University Florence, SC, 29501 U.S.A

Promoted to Associate Professor with Tenure before departing from Francis Marion University.

October 1983 - June 1988: Teaching Assistant

Department of Physics University of Chicago Chicago, IL 60637 U.S.A.

Research Experience

March 1999 – Present: Visiting Scientist

Argonne National Laboratory

Argonne, IL 60091

(allows 24 hr access to laboratory and use of

research facilities.)

Summer 1995: Faculty Research Participant

Theory Group Argonne National Laboratory.

November 1990 Postdoctoral Physicist

- August 1992: Department of Physics and Astronomy

University of Pittsburgh Pittsburgh, PA 15260

November 1988 Postdoctoral Physicist

- October 1990: Theory Group

Paul Scherrer Institute

CH-5232 Villigen, Switzerland

October 1985 - October 1988: Research Assistant

Physics Division

Argonne National Laboratory (University of Chicago) Argonne, IL 60439 Performed research in

intermediate energy nuclear theory.

Thesis advisor: Dr. T. -S. H. Lee

Professional Societies

Member, American Physical Society, Nuclear Physics Division Member, Prairie Section, American Physical Society Full Member, American Meteorological Society Member, American Nuclear Society Member, AGU Member, Sigma Pi Sigma Member, Sigma Xi

Founding Member of the American Physical Society Prairie Section (Served as Chair-Elect, Chair, Past-Chair, and currently, elected Representative)

Grants Received

RUI Project: A Wide-Area Array of Detectors to Measure the Energy Spectrum of Lightning-Generated X-Rays and the Atmospheric Conditions that Support Them. National Science Foundation: AGS-1232594, Fall 2012

Nuclear Energy University Program: Nuclear InfrastructureDepartment of Energy, Summer 2009

\$171,000

TeraGrid Pathways Fellowship: Study of Protein Folding Using Green's Function Monte Carlo Techniques

TeraGrid, Spring 2009, \$13,000+TeraGrid Time

Experiments in Modern Physics

Nalco Corporation Science Equipment Grant Spring 2001. \$7,215

A Proposal for Connecting Francis Marion University to the NSFNET

National Science Foundation Grant, 1994 - 1996 \$15,300

Studies of Spin Observables for the Threshold Photoproduction and Electroproduction of Pseudoscalar Mesons

Research Corporation Cotrell Science Grant, 1993 - 1994 \$22,300

Publications

Quarks, QCD, and the Real World of Experimental Data

H. Lipkin (Lecture notes edited by C. G. Fasano) Argonne Informal Report. (1987).

Quark Compound Bag Model of NN Scattering up to 1 GeV

C. G. Fasano and T. -S. H. Lee Physical Review **C25**, 1481 (1987).

Three-Nucleon Force in the Quark Compound Bag Model

C. G. Fasano and T. -S. H. Lee Physics Letters B **217**, 9, (1989).

Meson-exchange []NN Model with a Separable Short-Range Interaction

C. G. Fasano and T. -S. H. Lee Nuclear Physics **A513**, 442 (1990).

Evidence Against a Strong Sub-threshold Structure in the Antiproton+Proton Amplitude

C. G. Fasano and M. P. Locher Z. Phys. **A336**, 469 (1990).

Rescattering Mechanisms for Antiproton+Deuteron -> Proton+X Reactions

C. G. Fasano, M. P. Locher, and S. Nozawa Z. Phys. **A338**, 95 (1991).

Relativistic Calculations for the Reactions Antiproton+Deuteron -> $5\square$ Proton and Antiproton Deuteron -> $3\square$ p at Rest

C. G. Fasano and M. P. Locher Z. Phys. **A338**, 197 (1991).

Comments on Nucleon-Nucleon Phase-Shift Analyses in the Excitation Region

C. G. Fasano and T. -S. H. Lee Z. Phys. **A340**, 101 (1991).

Z. 1 11ys. **A340**, 101 (1991).

Spin Observables at Threshold for Meson Photoproduction

C. G. Fasano F. Tabakin, and Bijan Saghai Physical Review **C46**, 2430 (1992).

Current Research Interests

Lightning Produced X-Rays (Measurement of Spectra and Modeling)

(with students at Monmouth College)

Modeling Agronomic Systems (as part of a startup business that I helped found: The Farmer's Business Network)

Additional Highlights

Served on the Monmouth College Faculty Senate multiple times, (served as Faculty Senate Chair twice.)

August 2010-Present: Co-architect and co-organizer of a new summer program for incoming students, returning students and faculty members known as *SOfIA: Summer Opportunity for Intellectual Activity*.

July 2004 - Present: Chair, Department of Physics.

July 2004-Present: Campus representative/Coordinator for Dual-Degree Engineering.

August 2001-Present: Started, organized and managed the Faculty Colloquium Series.

January 2001 - Present: Campus Representative for Oak Ridge Science Semester.

June 2001 - May 2006: Coordinator/Co-coordinator for Freshman Seminar/Introduction to the Liberal Arts.