

SIMONETTA LIUTI
Physics Department
University of Virginia
382 McCormick Rd., Charlottesville, VA 22904
(434) 982 2087
sl4y@virginia.edu

Education

Ph.D., Physics, University of Rome “La Sapienza” (Italy) 1989
Laurea in Fisica, University of Perugia (Italy) 1984

Professional Experience

Research Professor, University of Virginia 2001- present
Visiting Professor, College of William and Mary 1995-96
Staff Scientist, Istituto Nazionale di Fisica Nucleare (INFN) Rome 1991-2001
Post-doctoral Fellow, INFN, Rome 1989-91

Awards and Grants

– DOE Grant (PI), Office of Nuclear Physics 2016 - 2019 65,000\$ per AY
– DOE Topical Coll. (Co-PI), Office of Nuclear Physics, 2016 - 2020 22,000\$ per AY
– DOE Grant (PI), Office of Nuclear Physics 2013 - 2015 87,000\$ per AY
– DOE Grant (PI), Office of Nuclear Physics 2010 - 2013 95,000\$ per AY
– DOE Grant (PI), Office of Nuclear Physics 2007 - 2010 90,000\$ per AY
– DOE Grant (PI), Office of Nuclear Physics 2004 - 2007 52,300\$ per AY
– NSF ITR Grant (3% funding rate) (Co-PI), 2004 - 2007 54,000\$ per AY
– DOE Grant (PI), Office of Nuclear Physics 2001 -2004 50,000\$ per AY
– NRC (COBASE) Grant 2002-03 7,000\$
– NSF, Visiting Professorship for Women 1995-96 40,000\$

Professional Service and Committees

– Editorial Board of the Physical Review C (2017-2020)
– Member of the APS/DNP Allies Program on Sexual Harassment Prevention (2019)
– Invited participant to APS Workshop on Leading Institutional Change (prior to 2019 APS Meeting)

- Co-organizer of Reducing Sexual Harassment at UVA event, October 10, 2018.
- Chair: Conferences for Undergraduate Women in Physics (APS CUWiP), University of Virginia (2018)
- Chair line: South Eastern APS (SESAPS) (2012-2016)
- Committee on the Status of Women in Physics (CSWP) Blewett Fellowship Selection Committee, Member (2015, 2016)
- Co-organizer: Conferences for Undergraduate Women in Physics (APS CUWiP), Old Dominion University and Jefferson Laboratory (January 2016)
- Organizer of Session at SESAPS 2015 annual meeting on forming APS committee to address the issue of mental health.
- APS Topical Group on Hadronic Physics Nominating Committee (2009)

Professional Societies and Affiliations

- Member, American Physical Society
- Associate Member, Istituto Nazionale di Fisica Nucleare, Laboratori Nazionali di Frascati (Italy)

Research Interests and Publication Summary

- Spin and 3D Structure of the nucleon
- Intersection of QCD and physics beyond the standard model
- Quark and gluon structure of nuclei
- Neural network algorithms for particle physics

http://inspirehep.net/search?ln=en&p=f+a+liuti&action_search=Search

- 125 citeable papers on SPIRES, 49 papers in refereed journals
- > 2201 citations (1424 in refereed journals), 8 published papers with over 50 citations, 1 published paper with over 100 citations; h index: 26 (25 refereed journals)

Conference Organization/Convener

- 2018: Chair of Local Committee/Program Committee Member: "Femtography 2018, Symposium on Imaging and Visualization in Science", December 10-11, University of Virginia
- 2016: Organizer of "3D Parton Distributions: Path to the LHC", November 28th -December 2nd, Laboratori Nazionali di Frascati (Italy).
- 2015: Organizer of "Workshop on New Developments in Parton Hadron Duality", March 13th, University of Virginia.
- 2014: Co-organizer of "4th International Workshop on Nucleon Structure at High Bjorken x – HiX 2014", November 17-21, Laboratori Nazionali di Frascati (Italy)

- 2014: Program Chair of 81st annual meeting of the APS Southeastern Section, November 12-15 2014, Columbia, SC.
- 2010: Convener for Spin Section, DIS 2010, 18th International Workshop On Deep Inelastic Scattering And Related Subjects, April 19-23, Florence (Italy)
- 2008: Local Organizing Committee Member “SPIN 2008”, Charlottesville, Virginia, USA.
- 2008: Chair of Organizing Committee for ECT Workshop on “Nuclear Medium Effects on the Quark and Gluon Structure of Hadrons”, ECT*, Trento, Italy.
- 2005: Co-organizer of ‘First Workshop on Quark-Hadron Duality and the Transition to Perturbative QCD’, Laboratori Nazionali di Frascati (Italy).
- 2002: Local Organizing Committee Member “Testing QCD through Spin Observables in Nuclear Targets”, University of Virginia.

Referee and Reviewer

- Reviewer of NSF and DOE proposals.
- Referee for Physical Review **D**, Physical Review **C**, Physical Review Letters, Physics Letters B, Nuclear Physics **A**, Journal of Physics **G**.

Impact on Experimental Programs

- Provided numerous calculations that are crucial to assess the importance of experimental data (Recent Examples: M. Mazouz et al. (Jlab Hall A), arXiv:0709.0450; I. Bedlinskiy *et al.* [CLAS Collaboration], Phys. Rev. Lett. **109**, 112001 (2012) [arXiv:1206.6355 [hep-ex]]; I. Bedlinskiy *et al.* [CLAS Collaboration], arXiv:1405.0988; E. Seder *et al.* [the CLAS Collaboration], arXiv:1410.6615 [hep-ex])
- Member of LHCb collaboration, co-organizer of LHCb Spin initiative.
- Member of Electron Ion Collider User Group
- Co-author of Jefferson Lab Letter of Intent to PAC42 (June, 2014) “Studies of Chiral-Odd GPDs in Hard Exclusive Pseudoscalar Meson Production Using the CLAS12 Detector”
H. Avakian, V.Kubarovsky, A. Kim, S. Niccolai, I. Bedlinsky, P.Stoler, S. Goloskokov, S. Liuti.
- Co-spokeperson of Jefferson Lab Letter of Intent to PAC35 (January, 2010) “Nuclear Exclusive and Semi-Exclusive Physics with a New CLAS12 Low Energy Detector”
K. Hafidi, M. Amarian, W. Brooks, R. Dupré, D. Dutta, H. Egiyan, A. ElAlaoui, D. Gaskell, G.P. Gilfoyle, F.X. Girod, S. Liuti, S. Stepanyan.
- Co-spokeperson of Jefferson Lab CLAS collaboration experiment, E-08-024,

“Deeply Virtual Compton Scattering off ^4He ”
H. Egiyan, F. X. Girod, K. Hafidi, S. Liuti and E. Voutier.

Research Advising

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|-------------------------|---|-------------|
| Graduate Student | Omar Elgadawy | 2018 - |
| Graduate Student | Brandon T. Kriesten | 2016 - |
| Graduate Student | Abha Rajan | 2012 - 2017 |
| Graduate Student | Evan M. Askanazi | 2011- 2015 |
| Graduate Student | Kunal Kathuria | 2009-2013 |
| Graduate Student | J. Osvaldo Gonzalez Hernandez | 2008-12 |
| MS Student | Daniel Z. Perry | 2008-10 |
| Graduate Student | Saeed Ahmad | 2005-08 |
| Graduate Student | Swadhin K. Taneja (U.Va. Dissertation Year Fellow) | 2002-06 |
| Post-doctoral Associate | Heli Honkanen | 2005-07 |
| Undergraduate Student | Leonard S. Woody (Computer Science/Physics) | 2001-03 |

Recent Invited Talks

2018

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| <i>"Twist 2,3,4 GPDs and PDFs"</i> | <u>CTEQ Workshop at Jlab</u> Jefferson Lab |
| <i>"Mechanical properties of the nucleon from exclusive reactions"</i> | <u>Probing Nucleons and Nuclei</u> INT, Seattle, WA |

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2017

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| <i>"The dynamical origin of partonic angular momentum"</i> | <u>Transversity 2017</u> Frascati (Italy) |
| <i>"Accessing Parton OAM and Generalized Parton Distributions from Experiment"</i> | <u>Electromagnetic Probes</u> Jefferson Lab |
| <i>"Role of Generalized Transverse Momentum Distributions and Twist Three Generalized Parton Distributions in Proton Angular Momentum"</i> | <u>Tomography of Hadrons and Nuclei</u> INT, Seattle, WA |
| <i>"BSM Interactions and Hadron Phenomenology"</i> | <u>EIC User Group Meeting</u> Trieste (Italy) |
| <i>"Parton Orbital Angular Momentum: Experimental Leads"</i> | <u>QCD Evolution</u> Jefferson Lab |
| <i>"Parton Orbital Angular Momentum: Experimental Leads"</i> | <u>TMD Collaboration</u> Temple University |
| <i>"Reconstructing Parton Distribution Functions from their Coordinate Space Behavior"</i> | <u>PDF and Lattice Workshop</u> Oxford (UK) |
| <i>"On the Observability of Partonic OAM"</i> | <u>High Intensity Photon Source</u> Catholic U. |