

Biographical Sketches

Andrea Shindler
Associate Professor
FRIB – Michigan State University

Education and Training

University of Rome “Tor Vergata”, Department of Physics Rome, Italy M.Sc. 1997-1998
University of Rome “Tor Vergata”, Department of Physics Rome, Italy Ph.D. 1998-2002
Italian Professor Habilitation 2014

Research and Professional Experience

Associate Professor MSU 2016 - present
Postdoctoral Fellow Forschungszentrum Jülich 2013 – 2016
Heisenberg Fellow CERN – Humboldt University Berlin 2010 – 2013
Postdoctoral CSIC fellowship CERN - Universidad Autonoma Madrid 2009 – 2010
Research Associate University of Liverpool 2007 - 2009
Research Associate NIC/DESY Zeuthen 2002 - 2007

Publications

41 total refereed publications; Total number of citations 2796; 100+ papers: 13; 50-100 papers: 6 h-index = 30

10. elected publications relevant to the present proposal:

1. “Confirming the Existence of the strong CP Problem in Lattice QCD with the Gradient Flow”
J. Dragos, T. Luu, A. Shindler, J. de Vries, A. Yousif
Feb 8, 2019. 49 pp. e-Print: arXiv:1902.03254 [hep-lat]
2. “Three neutrons from Lattice QCD”
J.-L. Wynen, E. Berkowitz, T. Luu, A. Shindler, J. Bulava
Oct 30, 2018. 7 pp. Conference: C18-07-22. e-Print: arXiv: 1810.12747 [hep-lat]
3. “Massive photons: an infrared regularization scheme for lattice QCD+QED”
M. G. Endres, A. Shindler, B. C. Tiburzi, A. Walker-Loud
Phys.Rev.Lett. 117 (2016) no.7, 072002; e-Print: arXiv:1507.08916 [hep-lat]
4. “Nucleon electric dipole moment with the gradient flow: the θ -term contribution”
A. Shindler, T. Luu, J. de Vries
Phys.Rev. D92 (2015) no.9, 094518; e-Print: arXiv: 1507.02343 [hep-lat]
5. “Computation of the chiral condensate using $N_f = 2$ and $N_f=2+1+1$ dynamical flavors of twisted mass fermions”
Krzysztof Cichy, Elena Garcia-Ramos, Karl Jansen, Andrea Shindler
PoS LATTICE2013 (2014) 128; e-Print: arXiv: 1312.3534
6. “The epsilon regime with twisted mass Wilson fermions”
Oliver Bär, Silvia Necco, Andrea Shindler
JHEP 1004 (2010) 053; e-Print: arXiv: 1002.1582 [hep-lat]
7. “Light Baryon masses with dynamical twisted mass fermions”
..., P. Dimopoulos,..., R. Frezzotti,..., G. Herdoiza, K. Jansen,..., Christopher Michael,..., A. Shindler, C. Urbach, U. Wenger
Phys. Rev. D78 (2008) 014509; e-print: arXiv:0803.3190 [hep-lat]
8. “Twisted mass lattice QCD”
Andrea Shindler
Phys. Rept. 461 (2008) 37-110; e-print: arXiv:0707.4093

9. "Iterative methods for overlap and twisted mass fermions"
T. Chiarappa, K. Jansen, K.-I. Nagai, M. Papinutto, L. Scorzato, A. Shindler, C. Urbach, U. Wenger, I. Wetzorke
Comput. Sci. Dis. 1 (2008) 015001; e-print: hep-lat/0609023
10. "Twisted mass quarks and the phase structure of lattice QCD"
F. Farchioni, R. Frezzotti, K. Jansen, I. Montvay, G.C. Rossi, E. Scholz, A. Shindler, N. Ukita, C. Urbach, I. Wetzorke
Eur. Phys. J. C39 (2005) 421-433; e-print: hep-lat/0406039

Synergistic Activities

1. Coordinator lecturer and organizer of the Nuclear TALENT School "From Quarks and Gluons to Nuclear Forces and Structure"
2. Main organizer of the FRIB-TA Topical Program "Hadronic Electric Dipole Moments in the FRIB Era: from the Proton to Protoactinium"
3. Organizer of the "The 36th International Symposium on Lattice Field Theory" July 2018
4. Honors Research Seminar for undergraduates affiliated with the Honors College Fall 2017
5. Referee for JHEP (Impact factor: 6.220), Physics Letters B (Impact factor: 6.019), Physical Review D (Impact factor: 4.864), Nuclear Physics B (Impact factor: 3.946), JETP Letters (Impact factor: 1.364)

Identification of Potential Conflicts of Interest or Bias in Selection of Reviewers

Collaborators and Co-editors: Berkowitz, Evan (Forschungszentrum Jülich); Bulava, John (Southern Denmark University); Bussone, Andrea (University Autonoma of Madrid); de Vries, Jordy (University of Massachusetts); Dimopoulos, Petros (University of Rome "Roma Tre"); Dragos, Jack (Michigan State University); Endres, Michael G. (former MIT); Frezzotti, Roberto (University of Rome "Tor Vergata"); Gimenez, Vicente (University of Valencia-CSIC); Herdoiza, Gregorio (University Autonoma of Madrid); Kim, Jangho (Goethe University Frankfurt); Lubicz, Vittorio (University of Rome "Roma Tre"); Luu, Thomas (Forschungszentrum Jülich); Monahan, Christopher (University of Washington); Reyes, Jose G. (Michigan State University); Rossi, Gian Carlo (University of Rome "Tor Vergata"); Simula, Silvano (University of Rome "Roma Tre"); Tarantino, Cecilia (University of Rome "Roma Tre"); Tiburzi, Brian C. (The City College of New York); Walker-Loud, Andre (Lawrence Berkeley National Laboratory); Wynen, Jan-Lukas (Forschungszentrum Jülich); Yousif, Ahmed (Michigan State University)

Graduate and Postdoctoral Advisors and Advisees: Petronzio, Roberto (University of Rome 2 "Tor Vergata"); Garcia Ramos, Elena (Humboldt University/DESY-Zeuthen); Gonzalez Lopez, Jenifer (Humboldt University/DESY-Zeuthen); Urbach, Carsten (Frei University/DESY-Zeuthen); Rizik, Matthew D. (Michigan State University); Pederiva, Giovanni (Michigan State University)