Biographical Sketch

Huey-Wen Lin Assistant Professor Michigan State University

Education and Training

National Taiwan University, Taiwan	Physics	B.S.	1995-1999
Columbia University, New York, New York	Physics	Ph.D.	2000-2006

Research and Professional Experience

Assistant Professor	Physics/CMSE, Michigan State University	2016-present
Visiting Assistant Professor	University of California, Berkeley	2016-2015
Research Assistant Professor	University of Washington, Seattle	2009-2014
Postdoctoral Fellow	Jefferson Lab, Newport News	2006-2009

Publications

68 total refereed publications; h-index = 43 (Google Scholar)

10 selected publications relevant to the present proposal:

- 1. "Parton distributions and lattice QCD calculations: a community white paper", Huey-Wen Lin, Emanuele R. Nocera, Fred Olness, Kostas Orginos, Juan Rojo, et al, **Prog. Part. Nucl. Phys.** 100 (2018) 107-160 (*Impact Factor 11.229*)
- 2. "First Monte Carlo Global analysis of Nucleon Transversity with Lattice QCD Constraints", <u>H-W Lin</u>, W. Melnitchouk, A. Prokudin, N. Sato, H. Shows, **Phys. Rev. Lett.** 120 (2018) no.15, 152502
- 3. "Proton Isovector Helicity Distribution on the Lattice at Physical Pion Mass", <u>H.-W. Lin</u>, J.-W. Chen, L. Jin, Y.-S. Liu, Y. Yang, J. Zhang, Y. Zhao, **Phys. Rev. Lett.** 121, 242003 (2018).
- 4. "Gluon Quasi-PDF from Lattice QCD", Zhou-You Fan, Yi-Bo Yang, Adam Anthony, Huey-Wen Lin, Keh-Fei Liu, arXiv:1808.02077 [hep-lat], **Phys. Rev. Lett.** 121, 242001 (2018).
- 5. "Neutron Electric Dipole Moment and Tensor Charges from Lattice QCD", T. Bhattacharya, V. Cirigliano, R. Gupta, <u>H.-W. Lin</u>, B. Yoon, *Phys. Rev. Lett.* 115, 212002 (2015).
- 6. "Helicity and Transversity Parton Distribution from Lattice QCD", Jiunn-Wei Chen, Xiangdong Ji, <u>Huey-Wen Lin</u>, and Jian-Hui Zhang, invited *Frontier Article*, Nucl.Phys. B911 (2016) 246
- 7. "Nuclear \sigma-terms and Scalar-Isoscalar WIMP-Nucleus Interactions from Lattice QCD", S.R. Beane, S.D. Cohen, W. Detmold, <u>H.-W. Lin</u>, M.J. Savage, Phys. Rev. D 89, 074505 (2014)
- 8. "Magnetic moments of light nuclei from lattice quantum chromodynamics", S.R. Beane, E. Chang, S. Cohen, W. Detmold, <u>H.-W. Lin</u>, K. Orginos, A. Parreno, M.J. Savage, B.C. Tiburzi., *Phys. Rev. Lett.* 113, 252001 (2014)
- 9. "Hyperon-Nucleon Interactions and the Composition of Dense Nuclear Matter from Quantum Chromodynamics", S. Beane, E. Chang, S.D. Cohen, W. Detmold, <u>H.-W. Lin</u>, T. Luu, A. Parreno, K. Orginos, M. Savage, A. Torok, A. Walker-Loud, *Phys. Rev. Lett.* 109, 172001

 Evidence for a Bound H-dibaryon from Lattice QCD", S. Beane, E. Chang, W. Detmold, <u>H.-W. Lin</u>, T. Luu, A. Parreno, K. Orginos, M. Savage, A. Torok, A. Walker-Loud, *Phys. Rev. Lett.* 106, 162001

Synergistic Activities

- 1. Elected Chair of Gordon Research Conference on Photonuclear Reactions (2020)
- 2. <u>Member</u>, International Advisory Committee for the 37th International Symposium on Lattice Field Theory (Lattice 2019)
- 3. <u>Chair</u> for the 36th International Symposium on Lattice Field Theory, Jul. 22–28, 2018, Michigan State University, East Lansing, MI, USA
- 4. <u>Initiator and co-organizer</u> for first Workshop on *Parton Distributions and Lattice Calculations in the LHC era*, Mar. 22–24, 2017, Oxford, UK
- 5. <u>Lead organizer</u> for INT program on *Intersections of BSM Phenomenology and QCD for New-Physics Search*, Institute for Nuclear Theory, Seattle, WA, Fall 2015

<u>Identification of Potential Conflicts of Interest or Bias in Selection of Reviewers:</u>

Collaborators and Co-editors

T. Bhattacharya (LANL), J.-W. Chen (National Taiwan U.), Vincenzo Cirigliano (LANL), W. Detmold (MIT), R. Gupta (LANL), X. Ji (Shanghai Jiaotong U. & Maryland U.), K.F. Liu (Kentucky U.), K. Orginos (JLab & William-Mary Coll.), D. Richard (JLab), M.J. Savage (INT), Y. Yang (ITP, China), B. Yoon (LANL)

Graduate and Postdoctoral Advisors
Norman Chris (Columbia University), David Richard (JLab)

Graduate and Postdoctoral Advisees
Yi-Bo Yang (ITP, China), Daniel Bolton (U. Colorado), Raul Briceno (ODU)