

## Biographical Sketch

Dean Lee

### Education and Training

Harvard University, Cambridge, MA	Physics	A.B.	1988-1992
Harvard University, Cambridge, MA	Physics	Ph.D.	1992-1998

### Research and Professional Experience

Professor	FRIB, Michigan State University	2017-present
Professor	North Carolina State University	2012-2017
Associate Professor	North Carolina State University	2007-2012
Assistant Professor	North Carolina State University	2001-2007
Postdoctoral Researcher	University of Massachusetts Amherst	1998-2001

### Honors and Awards

American Physical Society Fellow, 2014  
Alumni Distinguished Undergraduate Professor Award, NCSU, 2013  
Outstanding Teaching Award, NCSU, 2007  
Apker Award, American Physical Society, 1991

### Products

*Most Related to this Proposal*

1. D. Lee, J. Watkins, D. Frame, G. Given, R. He, N. Li, B.-N. Lu, A. Sarkar, “Time fractals and discrete scale invariance with trapped ions, arXiv:1901.01661.
2. D. Frame, R. He, I. Ipsen, Da. Lee, De. Lee, E. Rrapaj, “Eigenvector continuation with subspace learning”, Phys. Rev. Lett. **121** 032501 (2018).
3. A. Rokash, E. Epelbaum, H. Krebs and D. Lee, “Effective forces between quantum bound states,” Phys. Rev. Lett. **118**, 232502 (2017).
4. S. Elhatisari, N. Li, A. Rokash, J. M. Alarcon, D. Du, N. Klein, B.-N. Lu, U.-G. Meißner, E. Epelbaum, H. Krebs, T. A. Lähde, D. Lee, G. Rupak, “Nuclear binding near a quantum phase transition,” Phys. Rev. Lett. **117**, 132501 (2016).
5. S. Elhatisari, D. Lee, G. Rupak, E. Epelbaum, H. Krebs, T. A. Lähde, T. Luu and U.-G. Meißner, “*Ab initio* alpha-alpha scattering,” Nature **528**, 111 (2015).

*Five Other Products*

1. S. Elhatisari, E. Epelbaum, H. Krebs, T. A. Lähde, D. Lee, N. Li, B.-N. Lu, U.-G. Meißner and G. Rupak, “*Ab initio* calculations of the isotopic dependence of nuclear clustering,” Phys. Rev. Lett. **119**, 222505 (2017).
2. E. Epelbaum, H. Krebs, T. A. Lähde, D. Lee, U.-G. Meißner and G. Rupak, “*Ab Initio* Calculation of the Spectrum and Structure of  $^{16}\text{O}$ ,” Phys. Rev. Lett. **112**, 102501 (2014).
3. G. Rupak and D. Lee, “Radiative capture reactions in lattice effective field theory,” Phys. Rev. Lett. **111**, no. 3, 032502 (2013).
4. E. Epelbaum, H. Krebs, T. A. Lähde, D. Lee and U.-G. Meißner, “Viability of Carbon-Based Life as a Function of the Light Quark Mass,” Phys. Rev. Lett. **110**, 112502 (2013).
5. E. Epelbaum, H. Krebs, T. A. Lähde, D. Lee and U.-G. Meißner, “Structure and rotations of the Hoyle state,” Phys. Rev. Lett. **109**, 252501 (2012).

### **Synergistic Activities**

1. Scientific advisor to the Quantum Information Science Workshop at Michigan State University (2018)
2. Founder and organizer of the Advanced Studies Gateway at FRIB (2018-present)
3. Co-organizer of Mainz Institute for Theoretical Physics Workshop on Progress in Diagrammatic Monte Carlo Methods for Quantum Field Theories in Particle-, Nuclear-, and Condensed Matter Physics” (2017)
4. Co-organizer of Institute for Nuclear Theory Program “Toward Predictive Theories of Nuclear Reactions Across the Isotopic Chart” (2017)
5. Chair/Chair-Elect/Vice Chair APS Topical Group on Few-Body Systems and Multiparticle Dynamics (2016-present)

### **Identification of Potential Conflicts of Interest or Bias in Selection of Reviewers:**

#### *Collaborators and Co-editors*

Jose Manuel Alarcón (Universidad Complutense de Madrid), Martin Freer (University of Birmingham), Hans-Werner Hammer (Technical University of Darmstadt), Hisashi Horiuchi (Osaka University), Yoshiko Kanada-En’yo (Kyoto University), Nico Klein (University of Bonn), Timo Lähde (Forschungszentrum Jülich), Thomas Luu (Forschungszentrum Jülich / University of Bonn), Ulf-G. Meißner (University of Bonn / Forschungszentrum Jülich), Gautam Rupak (Mississippi State University)

#### *Graduate and Postdoctoral Advisors*

Howard Georgi (Harvard University), John Donoghue (University of Massachusetts Amherst), Eugene Golowich (University of Massachusetts Amherst), Barry Holstein (University of Massachusetts Amherst)

*Graduate and Postdoctoral Advisees*

Joey Bonitati (Michigan State University), Serdar Elhatisari (Karamanoglu Mehmetbey University), Dillon Frame (Michigan State University), Gabriel Given (Michigan State University), Rongzheng He (Michigan State University), Caleb Hicks (Michigan State University), Ning Li (Michigan State University), Bing-Nan Lu (Michigan State University), Avik Sarkar (Michigan State University), Richard Thomson (Alcatel), Jacob Watkins (Michigan State University)