

Kieran Mullen

Professional Experience:

- May 2001- present: Associate Professor in Condensed Matter Theory, University of Oklahoma.
- August 1994 - April 2001: Assistant Professor in Condensed Matter Theory, University of Oklahoma.
- September 1991 - July 1994: Postdoctoral Research Assistant in Condensed Matter Theory, Indiana University.
- September 1989 - August 1991: MacArthur Postdoctoral Research Assistant, in Solid State Physics, University of Illinois at Urbana-Champaign.
- January 1984 - August 1989: Research Fellow in Solid State Theoretical Physics, University of Michigan.
- September 1984 - May 1986: Teaching Assistant for Thermodynamics and Statistical Physics, University of Michigan Department of Physics
- June 1983 - September 1984: Research Assistant on Irvine-Michigan-Brookhaven Proton Decay Experiment, University of Michigan.

Education:

- Ph.D. in Physics, University of Michigan (1989), "*Charging Effects in Mesoscopic Tunnel Junctions*". Thesis advisor: Prof. Eshel Ben-Jacob.
- B.S. in Physics (*magna cum laude*) with minor in Mathematics, Georgetown University (1982).

Honors and Awards:

- Irene Rothbaum Award for Outstanding Assistant Professor in the College of Arts and Sciences.
- National Science Foundation, Faculty Early Career Development (CAREER) award.
- Horace H. Rackham Distinguished Dissertation Prize, Horace H. Rackham School of Graduate Studies, University of Michigan.
- Research Fellowship from the Center for High Frequency Microelectronics (1/86-1/89)
- Physics Medal, Georgetown University

Relevant Publications:

1. “Anisotropic transport of quantum Hall meron-pair excitations”, K. Moon and K. Mullen, *Phys. Rev. B* **57**, 1378 (1998).
2. “Quantum Driving Forces,” K. Mullen and T. Nance, *Bull. of the American Physical Society* **44**, 1871, (1999).
3. “Geometrical defects in Josephson junction arrays,” Kieran Mullen, *Phys. Rev. B* **60**, 4334 (1999).
4. “Thermodynamic Phase Diagram of the Quantum Hall Skyrmion System,” K. Moon and K. Mullen, *Phys. Rev. Lett.* **84**, 975 (2000).
5. “Massive Skyrmions in quantum Hall ferromagnets,” M. Abolfath, Kieran Mullen, and H. T. C. Stoof *Phys. Rev. B.* **63**, 75,315 (2001).
6. “Solitons in polarized double layer quantum Hall systems,” R. Khomeriki, M. Abolfath, and K. Mullen *Phys. Rev. B* **65**, 121310 (2002).
7. “Atomic-Scale Observation of Temperature and Pressure Driven Preroughening and Roughening,” Z. Ding, D. W. Bullock, P. M. Thibado, V. LaBella and Kieran Mullen, *Phys. Rev. Lett.* **90**, 216109 (2003).
8. “Theory of tunneling resonances of bilayer electron systems in a strong magnetic field,” M. Abolfath, R. Khomeriki, and K. Mullen, *Phys. Rev. B* **69**, 165321 (2004).

Previous Graduate Students and Postdocs: Kyungsun Moon

Previous Postdoctoral Advisors: S. M. Girvin, A. J. Leggett

External Collaborators: M. Wallin, H. T. C. Stoof, K. Moon