

Julia S. Meyer

Education:

- 2001 **Ph.D.** in Theoretical Physics, Universität zu Köln (D).
Thesis: *Mesoscopic phenomena driven by parallel magnetic fields*
- 1999 **Diplom** in Physics (comparable to M.Sc.), “with honors”,
Universität zu Köln (D).
Thesis: *Tunneling spectroscopy with twodimensional electron gases*

Employment:

- since 2004 **Assistant professor, Ohio State University** (Columbus, USA)
- Jan-Mar 09 Visiting professor, Université Joseph Fourier (Grenoble, F)
- 2004 - 2005 Enrico Fermi scholar, Argonne National Laboratory (USA)
- 2002 - 2004 Research associate, University of Minnesota (Minneapolis, USA)
- 2001 - 2002 Research associate, Universität zu Köln (D)
- 1999 - 2001 Research associate, Ruhr-Universität Bochum (D)
- 1997 - 1999 Teaching assistant, Universität zu Köln (D)

Scholarships, awards, etc:

1993-1998 Member of the Studienstiftung des deutschen Volkes (German Scholarship Foundation); 1995-1996 Erasmus Scholarship; 2002-2004 Feodor Lynen Research Fellowship of the Alexander von Humboldt Foundation; 2004-2005 Enrico Fermi Scholar at Argonne National Laboratory; 2008 Outstanding Graduate Teaching Award, OSU; 2009 NSF CAREER Award; 2009 University of Arizona ADVANCE Junior Scientist

Research funding:

- since 2007 U.S. Department of Energy, Office of Science: “Interaction effects in quasi-one-dimensional electron system” (DE-FG02-07ER46424)
- since 2008 National Science Foundation: MRSEC “Center for Emergent Materials” (DMR-0820414)
- since 2009 National Science Foundation: CAREER “Manifestations of the Proximity Effect and Related Phenomena in Hybrid Structures” (DMR-0847570)

Selected synergistic activities:

- 45+ invited talks at conferences, workshops, and research institutions
- Referee for Physical Review Letters, Physical Review B, Nature Nanotechnology, Journal of Physics: Condensed Matter, Superconductor Science and Technology; Reviewer for Department of Energy and National Science Foundation
- Organization of conference on ‘Quantum Phenomena in Confined Dimensions’ (ICTP Trieste, I – 2007) and seminar/workshop on ‘Correlated Phenomena in Low-Dimensional Systems’ (MPS-PKS Dresden, GER – 2010)
- Various outreach activities: Breakfast of Science Champions for local Middle School students, 2009 Nano Day at COSI (Center of Science and Industry) in Columbus, 2009 GRASP Summer Camp for Middle School age girls

Group:

Graduate students: Mehul Dixit (since 2007)

Postdocs: Alexios Klironomos (2006 - 2007), Feifei Li (since 2009)

Collaborators (over the past 4 years):

A. Altland (University of Cologne, GER), M. Garst (University of Cologne, GER), T. Giamarchi (University of Geneva, CH), L.I. Glazman (Yale University), T. Hikihara (Hokkaido University, JP), M. Houzet (CEA Grenoble, F), A. Kamenev (University of Minnesota), A.D. Klironomos (American Physical Society), C. Kollath (University of Geneva, CH), A.I. Larkin (University of Minnesota), K.A. Matveev (Argonne National Laboratory, IL), A. Rosch (University of Cologne, GER), M. Sitte (University of Cologne, GER)

Selected Publications:

- [1] M. Houzet and J.S. Meyer, *Magnetic screening properties of superconductor-ferromagnet bilayers*, Phys. Rev. B **80**, 012505 (2009); arXiv:0903.2245.
- [2] M. Sitte, A. Rosch, J.S. Meyer, K.A. Matveev, and M. Garst, *Emergent Lorentz symmetry with vanishing velocity in a critical two-subband quantum wire*, Phys. Rev. Lett. **102**, 176404 (2009); arXiv:0811.4579.
- [3] J.S. Meyer, K.A. Matveev, and A.I. Larkin, *Transition from a one-dimensional to a quasi-one-dimensional state in interacting quantum wires*, Phys. Rev. Lett. **98**, 126404 (2007); cond-mat/0612101.
- [4] A.D. Klironomos, J.S. Meyer, and K.A. Matveev, *Spontaneous spin polarization in quantum wires*, Europhys. Lett. **74**, 679 (2006); cond-mat/0507387.
- [5] J.S. Meyer, A. Kamenev, and L.I. Glazman, *Electron transport in two-dimensional arrays*, Phys. Rev. B **70**, 45310 (2004); cond-mat/0401343.
- [6] J.S. Meyer, A. Altland, and B.L. Altshuler, *Quantum transport in parallel magnetic fields: A realization of the Berry-Robnik symmetry phenomenon*, Phys. Rev. Lett. **89**, 206601 (2002); cond-mat/0105623.