

**Michael Schütt**  
Department of Physics  
University of Minnesota  
Minneapolis, MN 55455  
(612) 707 1195

## ACADEMIC POSITIONS

March 2014 - present: Postdoctoral Research Associate at University of Minneapolis.  
Supervisor: Prof. Rafael Fernandes

Feb 2013 - Feb 2014: Postdoctoral Research Associate at Karlsruhe Institute of Technology  
Supervisor: Dr. Igor Gornyi

## EDUCATION

Nov 2009 - Jan 2013: PhD in physics, at Karlsruhe institute for Technology  
Advisor: Prof. Alexander Mirlin  
Co-Advisor: Prof. Jörg Schmalian  
*Title: Coulomb Interaction and Transport in Graphene Structures*

Sept 2004 - Oct 2009: Diploma in physics, at University of Karlsruhe  
Advisor: Prof. Alexander Mirlin  
*Title: Interaction effects in electronic transport in graphene*

## HONORS

Fedor Lynen Research Fellowship from the Humboldt Foundation (2013)

## RESEARCH INTERESTS

My main area of research is the theory of condensed matter. I am especially interested in non-equilibrium properties and transport in critical, interacting and disordered many-body systems. Materials, which develop novel electronic, magnetic, mechanical or optical properties when exposed to a changing environment, are of particular interest. The dynamics of phase transitions, hydrodynamic transport and turbulence, interacting disordered systems in non-equilibrium, relaxation properties close to criticality or competing phases and transport in systems with collective phenomena.

## CONFERENCES AND TALKS

### invited

- 02/13 University of Minnesota, Seminar of the school for physics and astronomy,  
*Coulomb Drag in Graphene: A kinetic equation approach*
- 05/13 ICTP Trieste, Condensed Matter and Statistical Physics Seminar,  
*Coulomb Drag and Hall Drag in Graphene: A kinetic equation approach*
- 05/15 University of Illinois at Urbana-Champaign, Condensed Matter Seminar,  
*Electronically-induced resistivity anisotropy in underdoped cuprates and iron pnictides*
- 08/15 International Conference on Recent Progress in Many-Body Theories,  
*Resistivity Anisotropy in Iron Pnictides Revisited: the Impact of Quasi-Particle Renormalization.*
- 02/16 University of Wisconsin-Madison, Condensed Matter Seminar  
*Origin of the in-plane resistivity anisotropy of the iron pnictides: scattering rate or plasma frequency?*
- 04/16 International Conference on Superconductivity and Magnetism 2016  
*Origin of the in-plane resistivity anisotropy of the iron pnictides: scattering rate or plasma frequency?*

**PUBLICATIONS**

- M. Schütt, P. M. and Ostrovsky, I. V. Gornyi, and A. D. Mirlin, *Phys. Rev. B*, **83** 155441, (2011)
- M. Schütt, P. M. Ostrovsky, M. Titov, I. V. Gornyi, B. N. Narozhny, A. D. Mirlin, *Phys. Rev. Lett.*, **110** 026601, (2013)
- M. Titov, R. V. Gorbachev, B. N. Narozhny, T. Tudorovskiy, M. Schütt, P. M. Ostrovsky, I. V. Gornyi, A. D. Mirlin, M. I. Katsnelson, K. S. Novoselov, A. K. Geim, L. A. Ponomarenko, *Phys. Rev. Lett.* **111** 166601 (2013)
- M. Schütt, *Dissertation*, (2013)
- B. N. Narozhny, I. V. Gornyi, M. Titov, M. Schütt, and A. D. Mirlin *Phys. Rev. B* **91** 035414, (2015)
- P.S. Alekseev, A.P. Dmitriev, I.V. Gornyi, V.Yu. Kachorovskii, B.N. Narozhny, M. Schütt, and M. Titov *Phys. Rev. Lett.* **114** 156601, (2015)
- M. Schütt and R. M. Fernandes *Phys. Rev. Lett.* **115** 027005, (2015)
- U. Briskot, M. Schütt, I. V. Gornyi, M. Titov, B. N. Narozhny, and A. D. Mirlin *Phys. Rev. B* **92** 115426, (2015)
- Jiang, Shan and Liu, Lian and Schütt, M. and Hallas, Alannah M. and Shen, Bing and Tian, Wei and Emmanouilidou, Eve and Shi, Aoshuang and Luke, Graeme M. and Uemura, Yasutomo J. and Fernandes, Rafael M. and Ni, Ni *Phys. Rev. B* **93** 174513, (2016)