

B2.15 (Mirlin)

- [B2.15:1] * A.D. Mirlin, F. Evers, I.V. Gornyi, and P.M. Ostrovsky, “*Anderson Transitions: Criticality, Symmetries, and Topologies*”, in “*Fifty Years of Anderson localization*”, edited by E. Abrahams (World Scientific, Singapore, 2010), Chapter 6, pp.107-150.
- [B2.15:2] * A.D. Mirlin, F. Evers, I.V. Gornyi, and P.M. Ostrovsky, “*Anderson Transitions: Criticality, Symmetries, and Topologies*”, *International Journal of Modern Physics B* **24**, 1577 (2010).
- [B2.15:3] * P.M. Ostrovsky, I.V. Gornyi, and A.D. Mirlin, “*Interaction-induced criticality in Z_2 topological insulators*”, *Phys. Rev. Lett.* **105**, 036803 (2010).
- [B2.15:4] *‡ I.S. Burmistrov, S. Bera, F. Evers, I.V. Gornyi, A.D. Mirlin, *Wave function multifractality and dephasing at metal-insulator and quantum Hall transitions*, *Annals Phys.* **326**, 1457 (2011).
- [B2.15:5] ‡ M. Schneider, D. A. Bagrets, and A. D. Mirlin, *Theory of non-equilibrium electronic Mach-Zehnder interferometer*, *Phys. Rev. B* **84**, 075401 (2011).
- [B2.15:6] P. M. Ostrovsky, I. V. Gornyi, and A. D. Mirlin, *Symmetries and weak localization and antilocalization of Dirac fermions in HgTe quantum wells*, *Phys. Rev. B* **86**, 125323 (2012).
- [B2.15:7] ‡ E.J. König, P.M. Ostrovsky, I.V. Protopopov, and A.D. Mirlin, *Metal-insulator transition in two-dimensional random fermion systems of chiral symmetry classes*, *Phys. Rev. B* **85**, 195130 (2012)
- [B2.15:8] S. Ngo Dinh and D.A. Bagrets, *Influence of Coulomb interaction on the Aharonov-Bohm effect in an electronic Fabry-Perot interferometer*, *Phys. Rev. B* **85**, 073403 (2012)
- [B2.15:9] ‡ G. Campagnano, O. Zilberberg, I.V. Gornyi, D.E. Feldman, A.C. Potter, and Y. Gefen, *Hanbury-Brown and Twiss interference of anyons*, *Phys. Rev. Lett.* **109**, 106802 (2012)
- [B2.15:10] S. Ngo Dinh, D.A. Bagrets, and A.D. Mirlin, *Analytically solvable model of an electronic Mach-Zehnder interferometer*, *Phys. Rev. B* **87**, 195433 (2013)
- [B2.15:11] E.J. König, P.M. Ostrovsky, I.V. Protopopov, I.V. Gornyi, I.S. Burmistrov, and A.D. Mirlin, *Interaction and disorder effects in 3D topological insulator thin films*, *Phys. Rev. B* **88**, 035106 (2013)
- [B2.15:12] ‡ G. Campagnano, O. Zilberberg, I.V. Gornyi, and Y. Gefen, *Hanbury Brown and Twiss Correlations in Quantum Hall Systems*, *Phys. Rev. B* **88**, 235415 (2013)
- [B2.15:13] ‡ C.-W. Huang, S.T. Carr, D. Gutman, E. Shimshoni, and A.D. Mirlin, *Transport via double constrictions in integer and fractional topological insulators*, *Phys. Rev. B* **88**, 125134 (2013)

Invited Talks at International Conferences

I.V. Gornyi, *Topologically protected metallic states of Dirac fermions in graphene and gapless semiconductors*, International Conference "Theoretical Problems of Semiconductor Physics", 30.06-02.07.2009, St.Petersburg, Russia

P.M. Ostrovsky, *Transport of disordered Dirac fermions*, International Symposium on Theoretical and Mathematical Physics, St.-Petersburg, Russia, 3 – 8 July 2009.

I.V. Gornyi, *“Interaction-induced criticality in topological insulators”*, Workshop “Selected problems in condensed matter physics”, Montpellier, France, November 19-20, 2009

I.V. Gornyi, *Topological insulators*, XVII International Ural Winter School on Physics of Semiconductors, Ekaterinburg, Russia, 14.02-20.02.2010.

A.D. Mirlin, *Topological insulators: symmetries, disorder and interaction effects*, Winter School on Semiconductor Physics, St. Petersburg, Russia, 25 February – 1 March 2010.

A.D. Mirlin, *Quantum interference meets topology: Quantum Hall effect, topological insulators, and graphene*, International Workshop “The Quantum Hall Effect at 30 Years”, Minneapolis, USA; April 30 - May 2, 2010

A.D. Mirlin, *Topological insulators: Disorder, Interaction, and quantum criticality of Dirac fermions*, Workshop on Localization Phenomena in Novel Phases of Condensed Matter, Abdus Salam ICTP, Trieste, Italy, 17 - 23 May 2010.

I.V. Gornyi, *“Interaction-induced criticality in topological insulators”*. Workshop “Interactions, disorder and topology in quantum Hall systems”, MPIPKS, Dresden, Germany, 06.06.2010-11.06.2010.

I.V. Gornyi, *“Interaction-induced criticality in topological insulators”*, POSTECH-APCTP Advanced Materials Science Workshop on “Metal-Insulator Transitions in Disordered and Magnetic Systems”, Asia Pacific Center for Theoretical Physics (APCTP), Pohang University of Science and Technology (POSTECH), Pohang, Korea, August 30-September 10, 2010.

A.D. Mirlin, *Multifractality and electron-electron interaction at metal-insulator, quantum Hall, and superconductor-insulator transitions*, Workshop “Superconductor-Insulator Transition”, Argonne (USA), 16-19 November 2010.

A.D. Mirlin, *Interaction, disorder, and quantum criticality in \mathbb{Z}_2 topological insulators*, DPG Spring Meeting, Dresden, 13 - 18 March 2011.

A.D. Mirlin, *Disorder, interaction and quantum criticality in topological insulators*, Workshop and School on Topological Aspects of Condensed Matter Physics. Trieste, 27 June - 8 July 2011.

I.V. Gornyi. *Interaction-induced criticality in topological insulators*. Euler Symposium on theoretical and Mathematical Physics, St. Petersburg, 8-13 July 2011.

P.M. Ostrovsky. *Localization in disordered systems with chiral symmetry*. Euler Symposium on theoretical and Mathematical Physics, St. Petersburg, 8-13 July 2011.

P.M. Ostrovsky. *Topological aspects of localization: From graphene to topological insulators*. CFN Summer School, Bad Herrenalb, 11-14 September 2011.

I.V. Gornyi, *“Interaction-induced criticality in topological insulators”*, Conference TIDS14 “Transport in interacting disordered systems”, Acre (Israel), 5-8 September 2011.

P.M. Ostrovsky, *“Localization of Dirac Fermions and Metal-insulator Transition in Chiral Systems”*, KITP Program “Topological Insulators and Superconductors”, Santa Barbara, 19 September – 16 December 2011.

A.D. Mirlin, *“Electron Transport in Topological Insulators: Disorder, Interaction and Quantum Criticality”*, KITP Program “Topological Insulators and Superconductors”, Santa Barbara, 19 September – 16 December 2011.

I.V. Gornyi, *Interaction-induced criticality in topological insulators*, Symposium on Theoretical and Mathematical Physics, July 8-13, 2011, St. Petersburg, Russia.

I.V. Gornyi, *Interaction-induced criticality in topological insulators*, Research Workshop “Transport in Interacting Disordered Systems - 14”, Acre, Israel, September 5 - 8, 2011.

A.D. Mirlin, *Classification and symmetry properties of scaling dimensions at Anderson transitions*, Conference “Mathematics and Physics of Disordered Systems”, Cambridge, UK, 17 September - 21 September 2012.

I.V. Gornyi, *Hanbury Brown-Twiss Interference of Anyons*, Workshop “Interferometry and Interactions in Non-equilibrium Meso- and Nano-systems”, Trieste, Italy, 8-12 April 2013.

A.D. Mirlin, *Quantum transport in disordered systems: Localization, interaction, symmetries and topologies*, Boulder School 2013: “Disorder and Dynamics in Quantum Systems”, Boulder, USA, July 8- August 2, 2013.