

List of Publications

Submitted Manuscripts

1. *Coulomb blockade signatures of the topological phase transition in semiconductor-superconductor nanowires*, B. Zocher, M. Horsdal, B. Rosenow, arXiv:1111.6527 (2011).
2. *Telegraph noise and the Fabry-Perot quantum Hall interferometer*, B. Rosenow and S. H. Simon, arXiv:1111.6475 (2011).
3. *Zero temperature Dephasing and the Friedel Sum Rule*, B. Rosenow and Y. Gefen, arXiv:1111.5849 (2011).
4. *Splitting of roton minimum in the $\nu = 5/2$ Moore-Read state*, Anthony R. Wright, Bernd Rosenow, arXiv:1106.3311 (2011).

Refereed Publications

1. *Competition between d-wave and topological p-wave superconductivity in the doped Kitaev-Heisenberg model*, T. Hyart, T. Wright, G. Khaliullin und B. Rosenow, Phys. Rev. B **85**, 140510(R) (2012).
2. *Incoherent scatterer in a Luttinger liquid: a new paradigmatic limit*, Alexander Altland, Yuval Gefen, Bernd Rosenow, Rev. Lett. **108**, 136401 (2012).
3. *A Quantized $\nu = 5/2$ State in a Two-Subband Quantum Hall System*, J. Nuebler, B. Friess, V. Umansky, B. Rosenow, M. Heiblum, K. v. Klitzing, J. Smet, Phys. Rev. Lett. **108**, 046804 (2012).
4. *Neutral mode heat transport and fractional quantum Hall shot noise*, S. Takei and B. Rosenow, Phys. Rev B **84**, 235316 (2011).
5. *Gapless excitations in strongly fluctuating superconducting wires*, Dganit Meidan, Bernd Rosenow, Yuval Oreg, Gil Refael, Phys. Rev. Lett. **107**, 227004 (2011).
6. *Signatures of non-Abelian statistics in non-linear coulomb blockaded transport*, R. Ilan, B. Rosenow, and A. Stern, Phys. Rev. Lett. **106**, 136801 (2011).

7. *Theory of the Fabry-Perot Quantum Hall Interferometer*, B.I. Halperin, A. Stern, I. Neder, and B. Rosenow, Phys. Rev. B **83**, 155440 (2011).
8. *Quantitative description of Josephson-like tunneling in $\nu_T = 1$ quantum Hall bilayers*, T. Hyart and B. Rosenow, Phys. Rev. B **83**, 155315 (2011).
9. *Dynamical conductivity at the dirty superconductor-metal quantum phase transition*, A. Del Maestro, B. Rosenow, J.A. Hoyos, T. Vojta, Phys. Rev. Lett. **105**, 145702 (2010).
10. *Interference, Coulomb blockade, and the identification of non-Abelian quantum Hall states*, A. Stern, B. Rosenow, R. Ilan, and B. I. Halperin, Phys. Rev. B **82**, 085321 (2010).
11. *Nonequilibrium electron spectroscopy of Luttinger Liquids*, S. Takei, M. Milletari, and B. Rosenow, Phys. Rev. B **82**, 041306(R) (2010).
12. *Signatures of neutral quantum Hall modes in transport through low-density constrictions*, B. Rosenow and B.I. Halperin, Phys. Rev. B **81**, 165313 (2010).
13. *Edge-State Velocity and Coherence in a Quantum Hall Fabry-Perot Interferometer*, D.T. McClure, Yiming Zhang, B. Rosenow, E.M. Levenson-Falk, C.M. Marcus, L.N. Pfeiffer, and K.W. West, Phys. Rev. Lett. **103**, 206806 (2009).
14. *Exact Solution for Bulk-Edge Coupling in the Non-Abelian $\nu = 5/2$ Quantum Hall Interferometer*, B. Rosenow, B. I. Halperin, S. H. Simon, and Ady Stern, Phys. Rev. B **80**, 155305 (2009).
15. *Theory of the pairbreaking superconductor-metal transition in nanowires*, A. del Maestro, B. Rosenow, and S. Sachdev, Annals of Physics **324**, 523 (2009).
16. *Infinite randomness fixed point of the superconductor-metal quantum phase transition*, A. del Maestro, B. Rosenow, M. Mueller, and S. Sachdev, Phys. Rev. Lett. **101**, 035701 (2008).
17. *Bulk-edge coupling in the non-abelian $\nu = 5/2$ quantum Hall interferometer* B. Rosenow, B.I. Halperin, S.H. Simon, and A. Stern, Phys. Rev. Lett. **100**, 226803 (2008).
18. *Universal thermal and electrical transport near the superconductor-metal quantum phase transition in nanowires* A. del Maestro, B. Rosenow, N. Shah, and S. Sachdev, Phys. Rev. B **77**, 180501 (2008). Selected for the May 19, 2008 issue of Virtual Journal of Nanoscale Science & Technology.
19. *Nonlinear ac conductivity of one-dimensional Mott insulators*, B. Rosenow, J. Stat. Mech. P04010 (2008).

20. *Particle-Hole Symmetry and the Pfaffian State*, M. Levin, B.I. Halperin, and B. Rosenow, Phys. Rev. Lett. **99**, 236806 (2007).
21. *Frequency-Temperature Crossover in the Conductivity of Disordered Luttinger Liquids*, B. Rosenow, A. Glatz, and T. Nattermann, Phys. Rev. B **76**, 155108 (2007).
22. *Influence of Interactions on Flux and Back-gate Period of Quantum Hall Interferometers*, B. Rosenow and B.I. Halperin, Phys. Rev. Letters **98**, 106801 (2007).
23. *Determining the optimal dimensionality of multivariate volatility models with tools from random matrix theory*, B. Rosenow, J. Econ. Dynamics Control **32**, 279 (2007).
24. *From stripe to checkerboard order on the square lattice in the presence of quenched disorder*, A. Del Maestro, B. Rosenow und S. Sachdev, Phys. Rev. B **74**, 024520 (2006).
25. *Nonlinear ac conductivity of interacting 1d electron systems*, B. Rosenow and T. Nattermann, Phys. Rev. B **73**, 085103 (2006).
26. *Large stock price changes: volume or liquidity?*, P. Weber and B. Rosenow, Quantitative Finance, **6**, 7 (2006).
27. *Order book approach to price impact*, P. Weber and B. Rosenow, Quantitative Finance **5**, 357 (2005).
28. *Quantum creep and variable range hopping of one-dimensional interacting electrons*, S.V. Malinin, T. Nattermann, and B. Rosenow, Phys. Rev. B **70**, 235120 (2004).
29. *Is the Quantum Hall Effect influenced by the gravitational field?*, F.W. Hehl, Y. Obukhov, and B. Rosenow, Phys. Rev. Lett. **93**, 096804 (2004).
30. *Dynamics of cross-correlations in the stock market*, B. Rosenow, P. Gopikrishnan, V. Plerou, and H.E. Stanley, Physica A **324**, 241 (2003).
31. *Nonuniversal behavior of scattering between fractional quantum Hall edges*, B. Rosenow and B. I. Halperin, Phys. Rev. Lett. **88**, 096404 (2002).
32. *Fluctuations and Market Friction in Financial Trading*, B. Rosenow, Int. J. Mod. Phys. C **13**, 419 (2002).
33. *Portfolio Optimization and the Random Magnet problem*, B. Rosenow, P. Gopikrishnan, V. Plerou, and H. E. Stanley, Europhys. Lett **59**, 500-506 (2002).

34. *Random Magnets and Correlations of Stock Price Fluctuations*, B. Rosenow, P. Gopikrishnan, V. Plerou, and H. E. Stanley, *Physica A* **314**, 762-767 (2002).
35. *A Random Matrix Approach to Cross-Correlations in Financial Data*, V. Plerou, P. Gopikrishnan, B. Rosenow, L. A. N. Amaral, T. Guhr, and H. E. Stanley, *Phys. Rev. E* **65**, 066126 (2002).
36. *Quantum Hall Stripes: Chern-Simons Theory and orientational mechanisms*, B. Rosenow and S. Scheidl, *Int. J. Mod. Phys. B* **15**, 1905 (2001).
37. *Quantifying and interpreting collective behavior in financial markets*, P. Gopikrishnan, B. Rosenow, V. Plerou, and H. E. Stanley, *Phys. Rev. E* **64**, 035106R (2001).
38. *A random matrix theory approach to financial cross-correlations*, V. Plerou, P. Gopikrishnan, B. Rosenow, L. A. N. Amaral, and H. E. Stanley, *Physica A* **299**, 175 (2001).
39. *Collective behavior of stock price movements - a random matrix theory approach*, V. Plerou, P. Gopikrishnan, B. Rosenow, L. A. N. Amaral, and H. E. Stanley, *Physica A* **287**, 374 (2000).
40. *Application of Random Matrix Theory to Study Cross-Correlations of Stock Prices*, B. Rosenow, V. Plerou, P. Gopikrishnan, L. A. N. Amaral, and H. E. Stanley, *International Journal of Theoretical and Applied Finance* **3**, 399 (2000).
41. *Universal and non-universal properties of cross-correlations in financial time series*, V. Plerou, P. Gopikrishnan, B. Rosenow, L. A. N. Amaral, and H. E. Stanley, *Phys. Rev. Lett.* **83**, 1471 (1999).
42. *Parisi-Symmetry of the Many-Body Quantum Theory of randomly interacting fermionic systems*, R. Oppermann and B. Rosenow, *Phys. Rev. B* **60**, 10325 (1999).
43. *Quantum Zeno effect and parametric resonance in mesoscopic physics*, G. Hackenbroich, B. Rosenow, and H. A. Weidenmüller, *Phys. Rev. Lett.* **81**, 5896 (1998).
44. *A Mesoscopic Quantum Eraser*, G. Hackenbroich, B. Rosenow, and H. A. Weidenmüller, *Europhys. Lett.* **44**, 693 (1998).
45. *Low-energy excitations in fermionic spin glasses: A quantum-dynamical image of Parisi symmetry breaking*, R. Oppermann and B. Rosenow, *Europhys. Lett.* **41**, 525 (1998).
46. *Magnetic Gaps Related to Spin Glass Order in Fermionic Systems*, R. Oppermann and B. Rosenow, *Phys. Rev. Lett.* **80**, 4767 (1998).

47. *Effects of Spin Glass order on Exciton Magnetic Polaron in Semimagnetic semiconductors*, A. L. Chudnovskiy, R. Oppermann, B. Rosenow, D. R. Yakovlev, U. Zehnder, and W. Ossau, Phys. Rev. B **55**, 10519 (1997).
48. *Tricritical Behavior of Ising Spin Glasses with Charge Fluctuations*, B. Rosenow and R. Oppermann, Phys. Rev. Lett. **76**, 1608 (1996).
49. *Effect of spin glass formation on exciton magnetic polaron in (Cd,Mn)Te*, A. L. Chudnovskiy, B. Rosenow, R. Oppermann, D. R. Yakovlev, U. Zehnder, and W. Ossau, Acta Physica Polonica **A90**, 755 (1996).

Conference Proceedings

1. *Order Book Dynamics and Price Impact*, P. Weber and B. Rosenow, in: Proceedings of the Third Nikkei Econophysics Symposium, H. Takayasu (Ed.), Springer (2006).
2. *Conservative Estimation of Default Rate Correlations*, B. Rosenow and R. Weißbach, in: Proceedings of the Third Nikkei Econophysics Symposium, H. Takayasu (Ed.), Springer (2006).
3. *Smooth Correlation Estimation - with Application to Portfolio Credit Risk*, R. Weißbach and B. Rosenow, in: C. Weihs and W. Gaul (Eds.): "Classification: The Ubiquitous Challenge", Springer (2005).
4. *Forecasting dynamical covariances: application of random matrix theory to model the multivariate volatility process*, B. Rosenow and C. Reese, in: H. Takayasu ed., Applications of Econophysics, Springer (Tokyo) (2003).
5. *Random Matrix Theory and Cross-Correlations of Stock Prices*, B. Rosenow, P. Gopikrishnan, V. Plerou, and H. E. Stanley, Empirical Science of Financial Fluctuations (H. Takayasu, ed.), Springer (2001).
6. *Chern-Simons theory for electrons in high Landau levels*, S. Scheidl and B. Rosenow, J. Physique IV (Colloq.) **9**, Pr10-223 (1999).
7. *Quantum Eraser and Quantum Zeno effect in mesoscopic physics*, G. Hackenbroich, B. Rosenow, and H. A. Weidenmüller, *Quantum Coherence and Decoherence-ISQM-Tokyo 1998* (Y. A. Ono and K. Fujikawa, eds.), Elsevier (1999).
8. *Fermionic quantum spin glass transitions*, R. Oppermann and B. Rosenow, Complex Behaviour of Glassy Systems (M. Rubi and C. Perez-Vicente, eds.), Lecture Notes in Physics, Springer (1996).

9. *Renormalization Group Analysis at the Lower and Upper Critical Dimension for the Localization Transition in a Disordered Superconductor*, B. Rosenow, R. Oppermann, and M. Binderberger, *Journal de Physique I* **6**, 61 (1995).