

CURRICULUM VITAE
Mikhail A. Skvortsov

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Personal information

Date of birth: July 6, 1972
Place of birth: Noginsk, Moscow reg., USSR
Citizenship: Russia
Marital status: married, 5 children

Research interests

Mesoscopic superconductivity
Quantum transport on a nanoscale
Nonperturbative aspects of Anderson localization
Low-dimensional nonequilibrium and interacting systems

Education

Moscow Institute of Physics and Technology (Moscow, Russia)
M.Sc. (cum laude) in Physics and Mathematics, 1995
Thesis: "Energy absorption in the mixed state of highly anisotropic HTSC"
Supervisor: Prof. M. V. Feigel'man

L. D. Landau Institute for Theoretical Physics (Chernogolovka, Russia)
Ph.D. in Physics and Mathematics, 1998
Thesis: "Level statistics and localization in 2D systems with chiral electron spectrum"
Supervisor: Prof. M. V. Feigel'man

Doctor of Science (Habilitation) in Theoretical Physics, 2008
Thesis: "Fluctuation and interference effects in mesoscopic systems"

Employment

L. D. Landau Institute for Theoretical Physics (Chernogolovka, Russia)
1998 – 1999 Junior Researcher
1999 – 2008 Researcher
2008 – present Senior Researcher
2005 – present Deputy Head of Quantum Mesoscopics Group

Skolkovo Institute of Science and Technology
2014 – present Associate Professor

Publications of M. A. Skvortsov

1. M. A. Skvortsov and V. B. Geshkenbein, “AC absorption and resistivity in the mixed state of highly anisotropic HTSC”, *ZhETF* **105**, 1379 (1994).
2. M. A. Skvortsov, “Quantum and thermal depinning of a string from a linear defect”, *Phys. Rev. B* **55**, 515 (1997).
3. M. V. Feigel'man and M. A. Skvortsov, “Anomalous flux-flow dynamics in layered type-II superconductors at low temperatures”, *Phys. Rev. Lett.* **78**, 2640 (1997).
4. M. V. Feigel'man and M. A. Skvortsov, “Supersymmetric Model of a 2D Long-Range Bose Liquid”, *Nucl. Phys. B* **506** [FS], 665 (1997).
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7. M. A. Skvortsov and M. V. Feigel'man, “Mesoscopics in vortex core: level statistics and transport properties”, *Physica C: Superconductivity* **332** (1-4), 432 (2000).
8. M. V. Feigel'man, A. I. Larkin, and M. A. Skvortsov, “Keldysh action for disordered superconductors”, *Phys. Rev. B* **61**, 12361 (2000).
9. M. V. Feigel'man, A. I. Larkin, M. A. Skvortsov, “Proximity Effect in Presence of Quantum Fluctuations”, in: *Quantum Physics at Mesoscopic Scale*, Eds. C. Glattli, M. Sanquer and J. Tran Tran Van, EDP Sciences, 2000, p. 327.
10. M. A. Skvortsov, A. I. Larkin, M. V. Feigel'man, “Superconductive proximity effect in interacting disordered conductors”, *Phys. Rev. B* **63**, 134507 (2001).
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12. M. V. Feigel'man, A. I. Larkin, M. A. Skvortsov, “Quantum superconductor-metal transition in a proximity array”, *Usp. Fiz. Nauk (Suppl.)* **171**, 99 (2001).
13. M. A. Skvortsov, A. I. Larkin, M. V. Feigel'man, “Proximity Action theory of superconductive nanostructures”, *Usp. Fiz. Nauk (Suppl.)* **171**, 76 (2001).
14. P. M. Ostrovsky, M. A. Skvortsov, M. V. Feigel'man, “Density of States below the Thouless Gap in a Mesoscopic SNS Junction”, *Phys. Rev. Lett.* **87**, 027002 (2001).
15. P. M. Ostrovsky, M. A. Skvortsov, M. V. Feigel'man, “Density of States in a Mesoscopic SNS Junction”, *Pis'ma v ZhETF* **75**, 407 (2002).

16. M. V. Feigelman, A. Kamenev, A. I. Larkin, and M. A. Skvortsov, “Weak charge quantization on a superconducting island”, *Phys. Rev. B* **66**, 054502 (2002).
17. M. A. Skvortsov, D. A. Ivanov, G. Blatter, “Vortex viscosity in the moderately clean limit of layered superconductors”, *Phys. Rev. B* **67**, 014521 (2003).
18. P. M. Ostrovsky, M. A. Skvortsov, and M. V. Feigel’man, “Density of Prelocalized States in Mesoscopic NS Systems”, *ZhETF* **123**, 399 (2003).
19. D. M. Basko, M. A. Skvortsov, and V. E. Kravtsov, “Dynamic localization in quantum dots: analytical theory”, *Phys. Rev. Lett.* **90**, 096801 (2003).
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23. M. A. Skvortsov, A. I. Larkin, and M. V. Feigel’man, “Dephasing in disordered metals with superconductive grains”, *Phys. Rev. Lett.* **92**, 247003 (2004).
24. M. A. Skvortsov, D. M. Basko, V. E. Kravtsov, “Energy absorption in time-dependent unitary random matrix ensembles: dynamic vs Anderson localization”, *Pis’ma v ZhETF* **80**, 60 (2004) [*JETP Lett.* **80**, 54 (2004)].
25. M. V. Feigel’man, A. S. Ioselevich, and M. A. Skvortsov, “Quantum percolation in granular metals”, *Phys. Rev. Lett.* **93**, 136403 (2004).
26. M. A. Skvortsov and M. V. Feigel’man, “Superconductivity in disordered thin films: giant mesoscopic fluctuations”, *Phys. Rev. Lett.* **95**, 057002 (2005).
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28. D. A. Ivanov and M. A. Skvortsov, “Quantum mechanics with a time-dependent random unitary Hamiltonian: A perturbative study of the nonlinear Keldysh sigma-model”, *Nucl. Phys. B* **737**, 304 (2006).
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32. M. V. Feigel’man, M. A. Skvortsov, and K. S. Tikhonov, “Proximity-induced superconductivity in graphene”, *Pis’ma v ZhETF* **88**, 780 (2008).
33. M. N. Serbyn, M. A. Skvortsov, A. A. Varlamov, and V. Galitski, “Giant Nernst Effect due to Fluctuating Cooper Pairs in Superconductors”, *Phys. Rev. Lett.* **102**, 067001 (2009).
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42. M. A. Skvortsov and M. V. Feigel’man, “Subgap states in disordered superconductors”, *ZhETF* **144**, 560 (2013) [*JETP* **117**, 487 (2013)].
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50. V. A. Kozii and M. A. Skvortsov, “Energy relaxation rate and its mesoscopic fluctuations in quantum dots”, *Ann. Phys.* **371**, 20 (2016).