

CURRICULUM VITAE

NAME: **Vladimir E. Kravtsov**

BORN: 17 October 1952, in Gorky, USSR.

NATIONALITY: Russian

LANGUAGES: English, German, Russian (mother tongue).

MARITAL
STATUS: Married, with two children.

ADDRESS: International Center for Theoretical Physics
11 Strada Costiera,
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UNIVERSITY
STUDIES: 1970-76 Dipl.Phys. (M.Sc.),
Moscow Institute of Physics
and Technology. Thesis title:
"Dynamics of vortices in
superconductors."

1976-79 Ph.D.,
Moscow Institute of Physics
and Technology. Thesis title:
"Structure and electronic properties
of chemisorbed systems".

HABILITATION: 1993 Dr.Rer.Nat.Habil.,
Die Ruprecht-Karls-Universitaet

Heidelberg. Thesis title:
"Anderson Localization and Nonlinear
Phase-Coherent Effects in Disordered Media".

EXPERIENCE:	1979-89	Junior Research Scientist at the Institute of Spectroscopy USSR Academy of Sciences, Troitsk, USSR
	1989-95	Senior Research Scientist at the Institute of Spectroscopy USSR Academy of Sciences, Troitsk, USSR
	1990-91	Humboldt Fellow at the Institute of Physics, Würzburg University, Wuerzburg, Germany.
	1991-93	Research Scientist (Wiss. Assistent, BAT2a) at the Institute of Theoretical Physics, Heidelberg University, Heidelberg, Germany.
	1993-95	Visiting Scientist at the International Centre for Theoretical Physics, Trieste, Italy.
	1996-98	Staff Associate at the International Centre for Theoretical Physics, Trieste, Italy.
	1995-2009	Senior Research Scientist at the Landau Institute for Theoretical Physics, Moscow, Russia.
	1998-2000	UNESCO Professional Staff P-2, (Condensed Matter Section)

at the International Centre for Theoretical Physics,
Trieste, Italy.

2000-2002 UNESCO Professional Staff P-3,
(Condensed Matter Section)
at the International Centre for Theoretical Physics,
Trieste, Italy.

2002- UNESCO Professional Staff P-5,
(Head, Condensed Matter Section)
at the International Centre for Theoretical Physics,
Trieste, Italy.

FIELD OF
RESEARCH:

Physics of disordered systems, mesoscopic phenomena.
Field-theoretical methods in statistical physics.
Phase transitions in two-dimensional systems.
Nonlinear phenomena in solids.
Electrodynamics of surfaces and interfaces.
Superconductivity.

TEACHING
EXPERIENCE:

undergraduate –
Ruprecht Karls Universitaet Heidelberg, Germany (1991-1993);
tutorials and problem classes

postgraduate –
Ph.D. advisor,
Institute of Spectroscopy and Landau Institute, Russia (1989-1999);
School of Advanced Studies, Trieste, Italy (2000-);

Semester course on ‘Magnetism and electron correlations’,
European Diploma Programme
at International Centre for Theoretical Physics,
Trieste, Italy (1994-1999).

Lectures on Localization and

Mesoscopic Phenomena (Spring College on Quantum Phases, 1994;
School on Noise in Nonlinear Systems, 1995,
Spring College on Localization, 1996, College on Quantum Critical
Phenomena in low-dimensional systems, 2001)
Internantional Centre for Theoretical Physics, Trieste, Italy.

Lectures on mesoscopic phenomena
in the external time-dependent field
Enrico Fermi School in Physics
Varenna, (Italy), 2002.

Lectures on Nonlinear Phase-Coherent Phenomena
at LXXXI Les Houches School on "Nanoscopic quantum transport",
Les Houches, France, June 28-July 30, 2004.

Lectures on Random Matric Theory, PhD Programme
at SISSA, Italy, semester course in 2008-2010.

INVITED TALKS

(since 1987):

Conferences on Theory of 2-d Electron Systems, Novosibirsk, 1987, 1989

US - Soviet Symposium on Light Propagation through Disordered Solids, Leningrad, 1987

US - Soviet Symposium on Two-Dimensional Electron Systems, Moscow, 1988

FRG-Soviet Symposium on Cooperative Phenomena in Solids, Moscow, 1989

International Conference on Nonlinear Optics and Solids, Alborg, Denmark, 1989

International Workshop on Anderson Transition and Mesoscopic Fluctuations, Braunschweig, FRG, 1990

National Seminar on Condensed Matter Physics, Delft, the Netherlands, 1990

International Conference "Localization-1990", London

5-th International Workshop on Quantum Hall Effect, Schleching, FRG, 1991

International Conference "Mesoscopic Physics and Fundamental Problems in Quantum Mechanics", Roma, 1994

Spring College on Quantum Phases, Trieste, Italy, 1994

International Conference "Quantum Transport in Nanostructures", Trieste, Italy, 1994.

Scuola nazionale di Fisica della Materia, Torino, Italy, 1994.

International workshop "International workshop on "Mesoscopic Transport, Localization and Quantum Hall Effect", Bad-Honnef, Germany, 1994.

International “Workshop on Localization and Mesoscopics”, Torino, Italy, 1995.

International “Workshop on Noise in Nonlinear Systems”, Trieste, Italy, 1995.

International A.Aronov Conference, Zichron Yaakov, Israel, January 1996.

Rencontres de Moriond on “Correlated fermions and transport in mesoscopic systems”, Les Arcs, France, January 1996.

Research Workshop on “Quantum chaos and mesoscopic systems”, Santa Barbara, United States, March 1996.

Research Workshop on “Quantum chaos and mesoscopic systems”, Trento, Italy, February 1997.

Newton Institute on “Supersymmetry and Trace Formulae: Chaos and Disorder” Cambridge, UK, September 1997.

International Conference “Mesoscopic and strongly correlated electron systems”, Chernogolovka, Russia, June 1997.

The XVIIIth Moriond Workshop on “Quantum Physics at Mesoscopic Scale”. Les Arcs, Savoie, France, 23-30 January 1999.

INFM Meeting, Catania, Italy, 14-18 June 1999.

International Conference “Localization 99”, Hamburg, Germany, 29 July-3 August 1999.

First International WE Heraeus Summer School “Mesoscopic Physics - between photonic and electronic systems”, Lutherstadt-Wittenberg, Germany 17-27 July 2000.

International Seminar on Non-Perturbative Approach to Disordered Systems and Quantum Hall Effect, Dresden, Germany 7-27 August, 2000.

Newton Institute on "Disorder and Interaction" Cambridge, UK, June 2000.

International Discussion Meeting on Mesoscopic and Disordered Systems, 18-20 December 2000, Bangalore, India.

The XXXVI-th Moriond Workshop on "Electronic correlations: from meso- to nano-physics". Les Arcs, Savoie, France, 20-27 January 2001.

International Conference on 'Physics at Nanoscale', Santa Barbara, USA, 20-26 August 2001.

International Conference on 'Random Matrix Theory', Stony Brook, USA, 14-19 February 2002.

International School of Physics Enrico Fermi, Varenna (Italy), 7-19 July 2002.

International Workshop on Chaos and Interactions at Institute for Nuclear Theory, University of Washington, Seattle (USA), August 26-September 6, 2002.

International Conference "Progres in Condensed Matter theory", Dresden (Germany), October 27-November 1, 2002.

International Workshop "Electrons in zero-dimensional conductors: beyond single-particle picture", Dresden (Germany), November 18-30, 2002.

International Workshop "Glassy States of Matter and Nonequilibrium Quantum Dynamics", UCSB, Santa Barbara (U S A) April 6-26, 2003.

HERAEUS Workshop "Quantum Field Theory in Particle and Solid State Physics", Dresden (Germany) June 2-6, 2003.

EURESCO Conference on "Fundamental Problems of Mesoscopic Physics", Granada, Spain, 6-11 September 2003.

39-th Recontres de Moriond "Quantum information and Decoherence in Nanosystems", La Thuile, Italy, Jan.25-Feb.1 2004.

LXXXI Les Houches School on "Nanoscopic quantum transport", Les Houches, France, June 28-July 30, 2004. (8 hours of lectures)

Workshop on "Perspectives on Random Matrix Theory" Centro Internacional de Ciencias AC (CIC) in Cuernavaca, Mexico, August 1-31, 2004.

International Conference on Theoretical Physics "TD-70", Lebedev Institute, Moscow, Russia, April 11-16, 2005.

International Conference "Landau Days 2005", Chernogolovka, (Moscow region, Russia) 18-23 June 2005.

International Conference on "Fundamentals of electronic nanosystems", St.Petersburg, Russia June 25-July 1, 2005.

ESF Research Conference "Fundamental Problems of Mesoscopic Physics: Entanglement and Coherence in Nanoelectronics", Aquafredda di Maratea, Italy, 3-8 September, 2005.

International Conference "New Trends in Quantum Mechanics: Fundamental Aspects and Applications", Palermo, 11-13 November 2005.

International Conference "Frontiers of Condensed Matter Theory", Minneapolis, U.S.A, May 4-7, 2006.

International Conference on "Nanoscale Superconductivity and Magnetism", Chernogolovka, Russia, 14-19 June 2006.

International Conference on "Fundamentals of Electronic Nanosystems", St.Petersburg, Russia, 24-30 June 2006.

International Conference "Rencontres du Vietnam 2006. Nanophysics: from fundamentals to applications", Hanoi, Vietnam 6-12 August 2006.

Research Programme and the Conference on "Stochastic Geometry and Field Theory: from Growth Phenomena to Disordered Systems", KITP, Santa Barbara, U.S.A., November 5-25, 2006.

A.I.Larkin Memorial Conference, Chernogolovka (Russia), June 24-27, 2007.

Leonard Euler Congress, International Seminar in Theoretical and Mathematical Physics, St.Petersburg (Russia), July 13-18, 2007.

4-th Windsor Summer School in Condensed Matter Theory: Quantum Transport and Dynamics in Nanostructures, Great Park, Windsor, (UK), August 6-18, 2007.

3-rd European Conference on the Fundamental Problems of Mesoscopic Physics and Nanoelectronics, Mojacar, (Spain) September 9-14, 2007.

International Conference on Fluctuations and Phase transitions in Superconductors, Nazareth Ilit (Israel), June 10-14, 2007.

School on Nanophysics at Low Temperatures, Chernogolovka (Russia), August 20-30, 2007.

XLIII Rencontres de Moriond "Quantum transport and nanophysics", La Thuile, Italy, March 8-15, 2008.

International Workshop "Quantum Dynamics and Noise in Interacting Disordered Systems" Orsay, France, May 29-30 2008.

L.D.Landau Memorial Conference, Chernogolovka, Russia, June 22-26, 2008.

International Workshop "Random Matrix Theory and Applications: from Number Theory to Mesoscopic Systems", Orsay, France, June 25-27, 2008.

Advanced Research Workshop "NanoPiter", St.Petersburg, Russia, June 28-July 4, 2008.

”Penetrating Physics by Random Matrices” Symposium in honor of H.A.Weidenmueller, Cuernavaca (Mexico), 2-6 March 2009.

International Workshop ”Anderson Localization in Non-linear and Many-Body Systems”, Dresden (Germany), 16-20 March 2009.

ISF Research Workshop on Random Matrices and Integrability, Yad Hashmona, Judean Hills, (Israel), 25-30 March 2009.

Second International Meeting on Materials for Electronic Applications, Hammamet (Tunisia), 8-10 May 2009.

Conference on Superconductor to Insulator Transitions, Trieste (Italy), 18-23 May 2009.

POLALAS Italian-Russian Workshop, Rome (Italy), April 10, 2009.

International Conference on ”Nanoscience and Engineering in Superconductivity, Hybrid and Josephson Structures”, Anacapri (Italy), 3-6 June 2009.

Symposium on Theoretical and Mathematical Physics, St.Petersburg (Russia), 3-8 July 2009.

International Programme of Institute of Nuclear Theory ”From Femtoscience to Nanoscience: Nuclei, Quantum Dots and Nanostructures”, U. Washington, Seattle (U.S.A.), August-September 2009.

”Quantum transport in Nanosystems” International Workshop in memory of A.Schmid and A.Aronov, Karlsruhe (Germany), 20-29 September 2009.

Russian-Italian Symposium ”Frontiers of Condensed Matter Physics”, Rome (Italy), 11-14 April 2010.

Advanced Research Workshop ”Fundamentals of Electronic Nano-Systems”, St.Petersburg (Russia), June 26-July 2 2010.

KITP Programme "Electron Glasses", Santa-Barbara, (USA),
September 7-October 1, 2010.

Advanced Workshop "Arrow of time and the problem of decoherence in closed solid state quantum systems", Paris (France),
11-15 October 2010.

Mediterranean School on Nano-Physics, 2-11 December 2010, Marrakech, (Morocco).

ORGANIZATION OF CONFERENCES, WORKSHOPS

Director of Spring College on Localization, 10-24 May 1996, ICTP, Trieste, Italy.

Local Organizer of the Adriatico Research Conference on ‘Superconductivity in Mesoscopic Systems’, 15-18 August 1997, ICTP, Trieste, Italy.

Director of the Extended Research Workshop on ‘Disorder, Chaos and Interaction in Mesoscopic Systems’, 27 July – 18 September 1998, ICTP, Trieste, Italy.

Local Organizer of the Adriatico Research Conference on ‘Non-Hermiticity and Disorder’, 23-26 August 1999, ICTP, Trieste, Italy.

Director of the Minisymposium on Correlations in Mesoscopic Systems, 1-4 August 2000, ICTP, Trieste, Italy.

Local organizer of the International Conference ‘Anderson Localization, Quantum Chaos and Random Matrices: rigorous methods vs physical intuition’, ICTP, Trieste Sept. 24-28, 2001.

Director of the ‘Workshop on Mesoscopic Physics and Electron Interaction’, 24 June -5 July 2002, ICTP, Trieste, Italy.

Third Stig Lundquist Conference on Advancing Frontiers of Condensed Matter Physics: Fundamental Interactions and Excitations in Confined Systems. (smr1511), 11-15 August 2003.

Workshop on Quantum Systems out of Equilibrium (smr 1567), 14-25 June 2004.

Workshop on Random Matrix Theory: Condensed Matter, Statistical Physics and Combinatorics (smr 1569); June 28-July 2, 2004

Summer School on Novel Quantum Phases and Non-equilibrium Phenomena in Cold Atomic Gases, Trieste (27 August-7 September 2007)

School on Stochastic Geometry, the Stochastic Loewner Evolution, and Non-Equilibrium Growth Process, 7-18 July 2008, ICTP (Trieste)

ICTP Conference "Graphene Week 2008", 25-29 August 2008, ICTP (Trieste)

Conference on "Superconductor-Insulator Transitions", 18-23 May 2009, ICTP, Trieste, Italy

Regional School on Physics at Nanoscale, 14-26 December 2009, Hanoi, Vietnam

Workshop on "Localization Phenomena in Novel Phases of Condensed Matter", 17-22 May 2010, ICTP, Trieste, Italy

Advanced Workshop on "Anderson Localization, Nonlinearity and Turbulence: a Cross-Fertilization", 23 August-3 September 2010, ICTP, Trieste, Italy

Mediterranean School on Nano-Physics, 2-11 December 2010, Marrakech, Morocco