

# CURRICULUM VITAE

Gleb OSHANIN

Laboratoire de Physique Théorique de la Matière Condensée (LPTMC) UMR CNRS 7600  
Université Pierre et Marie Curie  
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## *Personal data*

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Date and place of birth: June 15, 1963, Moscow, Russia  
Nationality: Russian, French  
E-mail: [oshanin@lptmc.jussieu.fr](mailto:oshanin@lptmc.jussieu.fr)  
tel: +33 1 44277237

## *Education*

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- 09/1980 - 01/1986 Physics Department, Moscow State University
- 12/1983 B.Sc., General Physics and Mathematics
- 01/1986 M.Sc., Physics  
**Master's Thesis:** "Transport of relativistic electron beams in dense gases", supervised by Prof. A. Rukhadze, Lebedev Institute of Physics, Moscow
- 10/1989 Ph.D. in Theoretical and Mathematical Physics  
**Ph.D. Thesis:** "Kinetics of many-particle diffusion-controlled processes", supervised by Prof. S. Burlatsky and Prof. A. Ovchinnikov, Institute of Chemical Physics, Moscow

## *Research experience*

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- Since 10/1997 CNRS Staff Researcher (**CR1**)  
**2<sup>nd</sup> class Research Director** since 10/2010  
**1<sup>st</sup> class Research Director** since 10/2014  
Theoretical Condensed Matter Physics (LPTMC),  
University Pierre & Marie Curie, Paris
- 02/2009 – 02/2010 *Associated Researcher*  
Laboratory J.-V.Poncelet (International CNRS laboratory),  
Independent University, Moscow, Russia
- 07/1997 - 09/1997 *Associated Researcher* at CNRS,  
Laboratoire de Physique Théorique des Liquides (LPTL)  
University Pierre & Marie Curie, Paris
- 04/1996 - 06/1997 *Invited Professor*,  
University of Mons-Hainaut, Belgium
- 10/1995 - 03/1996 *Associated Researcher* at CNRS  
LPTL, University of Paris 6
- 09/1995 *Invited Professor*  
Department of Theoretical Physics, University Paris 11
- 11/1994 - 08/1995 *Associated Researcher* at CNRS  
LPTL, University of Paris 6
- 06/1993 - 11/1994 *Humboldt Fellow*  
Department of Polymer Physics  
University of Freiburg, Germany

- 07/1992 - 05/1993 *Associated Researcher*  
LPTL, University of Paris 6
- 05/1986 - 07/1992 *Junior, then Staff Researcher*  
Statistical Physics Laboratory,  
Institute of Chemical Physics, Moscow

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### *Visiting Positions*

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- 1994 - Associated researcher at CNRS, France, Section 17, 10 months
- 1995 - Associated researcher at CNRS, France, Section 02, 6 months
- 1996 - Invited Professor, Belgian National Scientific Foundation (FNRS), 18 months
- 1997 - Associated researcher at CNRS, France, 2 months
- 2004 - Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 2 months
- 2005 - Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 2 months
- 2005 - Visiting scientist, AIST Tsukuba, Japan, 1 month
- 2007 - Visiting scientist, AIST Tsukuba, Japan, 3 months
- 2008 - Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 2 months
- 2008 - Invited Professor (FNRS), University of Mons-Hainaut, Belgium, 1 month
- 2009 – Visiting researcher, Laboratory J.-V.Poncelet, Independent University, Moscow, Russia, 12 months
- 2010 - Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 3 months (follow up stay within the framework of the Bessel Research Award)
- 2011 - Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 4 months (February-March, June-July)
- 2011 – visiting scientist, NORDITA, Stockholm, Sweden, 2 weeks (September)
- 2012 - Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 2 months (February-March)
- 2012 - Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 2 months (June-July)
- 2012 – Visiting Professor, Imperial College London, UK, 2 weeks (August)
- 2012 - Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 2 months (September - October)
- 2013 - Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 2 months (June - July)
- 2013-2014 – Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 2 months (December-January) (follow up stay within the framework of the Bessel Research Award)
- 2014 – Program participant and organizer of a focussed work group, Kavli Institute for Theoretical Physics, UCSB, USA, 3 weeks (March)
- 2014 – Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 2 months (November-December)
- 2015 – Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 4 months (February-March, June, October)
- 2016 – Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 4 months (February, March, June, July, November, December)
- 2017 – Visiting scientist, Max-Planck Institute, Stuttgart, Germany, 4 months (February, March, May, June, November, December)

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### *Grants and Fellowships*

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- 1992 - Post doctoral fellowship by the French Ministry of Research and Technologies (MRT)
- 1993 - Fellowship by the Alexander von Humboldt Foundation, Germany
- 1997 - Bilateral Franco-German PROCOPE-grant
- 2003 - Bessel Research Prize, Alexander von Humboldt Foundation, Germany
- 2006 - Bilateral Franco-Polish POLONIUM-grant, Coordinator
- 2007 - ANR "DYOPTRI" (**D**ynamique et **O**ptimisation des **P**rocessus de **T**Ransport **I**ntermittents) grant
- 2009 – Grants from CNRS, Russian Foundation for Basic Research and private Dmitri Zimin "DYNASTY" Foundation for organization of the Franco-Russian Workshop "**Stochastic Processes in Physics and Biology**"
- Grant RFBR 10-01-9311-CNRS-a project "**Combinatorics of groups and related structures**", Coordinator

- 2011 - FP7-PEOPLE-2010 Marie Curie Action International Research Staff Exchange Scheme “**Dynamics and Cooperative Phenomena in Complex Physical and Biological Media**” between different institutions in Germany, UK, France, Israel, Ukraine and Russia, Scientific Coordinator
- 2011 – Grant from Max-Planck Institute for Complex Systems, Dresden, Germany, for organization of the International Workshop “**Wetting and Capillarity in Complex Systems**”, February 2013, Dresden, Germany
- 2012 – Grant from the Kavli Institute for Theoretical Physics, UCSB, for organization of the “**Focused Working Group on Self-Propelled Micro-Objects** », March 2014.
- 2012 – Grant from the European Science Foundation, program “Exploring the physics of small devices” for organization of the international workshop “**Exploration & Search III**”, June 2013, Cargèse, France
- 2013 – Grant from the Office of Naval Research (ONR) Global for organization of the international workshop “**Exploration & Search III**”, June 2013, Cargèse, France
- 2013 – Grant from the Institute for Mathematical Sciences, National University of Singapore, for organization (jointly with Rongfeng Sun and Dong Wang) of International Workshop “**Stochastic Processes in Random Media**”, May 2015
- 2014 – CNRS Prime d’excellence scientifique
- 2015 - Grant from the Office of Naval Research (ONR) Global for organization of the international workshop “**Stochastic Processes in Random Media**”, May 2015, IMS NUS, Singapore
- *Journal of Physics A* Best Paper Prize 2015
- 2015 - Grant from the Office of Naval Research (ONR) Global for organization of the international workshop “**Anomalous diffusion: Fundamentals & Models for Complex Systems**”, October 2015, König Karlsbad, Black Forest, Germany
- 2016 - Grant from the Office of Naval Research (ONR) Global for organization of the international workshop “**Fluctuations in Small Complex Systems III**”, October 2016, Venice, Italy
- 2017 - Outstanding Reviewer of 2016, Journal of Physics A: Mathematical and Theoretical

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### **Research Interests**

Condensed Matter Theory, Non-Equilibrium and Equilibrium Statistical Mechanics, Chemical Physics

- Since 1988 - Fluctuation Phenomena in Reaction/Diffusion Systems
- Since 1988 - Random Transport and Dynamics in Disordered Media
- Since 1991 - Stochastic Dynamics of Interacting Particles Systems
- Since 1994 - Wetting Phenomena
- Since 2006 - Stochastic Search, Evasion and Pursuit
- Since 2008 - First-Passage phenomena
- Since 2012 – Single Particle Tracking Analysis

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### **Teaching and educational activities**

- Undergraduate students:
  - **A. Stemmer**, Diploma Thesis, Freiburg University, 1993 (with A. Blumen)
- Postgraduate students:
  - **A. Mogutov**, Ph. D. Thesis, University of Paris 6, 1992 (with M. Moreau)
  - **H. Schiessel**, Ph. D Thesis, Freiburg University, 1994 (with A. Blumen)
  - **S. Luding**, Ph. D Thesis, Freiburg University, 1994 (with A. Blumen)
  - **M. De Ruijter**, Ph. D Thesis, University of Mons-Hainaut, 1996 (with J. De Coninck)
  - **O. Bénichou**, Ph. D Thesis, University of Paris 6, 1999 (with M. Moreau)
  - **M. Copepy**, Ph. D Thesis, University of Paris 6, 2004 (with M. Moreau)
  - **P. Illien**, Ph. D Thesis, University of Paris 6, 2015 (with O. Bénichou and R. Voituriez)
- Postdocs:
  - **R. Voituriez**, 2005
  - **O. Vasilyev**, 2006
  - **A. Sarracino**, 2015 (with O. Bénichou and R. Voituriez)

## Editorial

- Co-editor (with Katja Lindenberg, (UCSD, USA) and Masanori Tachiya, (AIST, Tsukuba, Japan)), special issue of the Journal of Physics: Condensed Matter “**Diffusion in Liquids, Chemical and Biophysical Systems**” Volume 17 No 49 (2005)
- Co-editor (with Katja Lindenberg and Masanori Tachiya), special issue of the Journal of Physics: Condensed Matter “**Reaction Kinetics Beyond the Textbook: Fluctuations, Many Particle Effects and Anomalous Dynamics**” Volume 19 No 6 (2007)
- Co-editor (with Gary Grest and Edmund B Webb, Sandia National Labs, USA), special issue of the Journal of Physics: Condensed Matter “**Dynamics of Wetting**” Volume 21 No 46 (2009)
- Co-editor (with Yuriy Holovatch, Ihor Mryglod (ICM, Lviv, Ukraine) and Christian von Ferber (University of Coventry, UK), European Physical Journal - Special Topics 216, 57 (2013), special issue “**From Brownian motion to self-avoiding walks and Levy Flights** »
- Co-editor (with Ralf Metzler (University of Potsdam, Germany) and Sidney Redner (Boston University & Santa Fe Institute, USA), special volume “**First-Passage Phenomena and Their Applications**”, World Scientific Publishers, 2014
- Scientific Editor of the Russian Edition of the textbook by James Sethna “**Statistical Mechanics: Entropy, Order Parameters, and Complexity**”, Scientific World Publishing House, Moscow, 2013
- Member of the Editorial Board of “Scientific Reports”, Nature Publishing Group
- Co-editor (with Paolo Margaretti (MPI IS, Stuttgart) and Julian Talbot (LPTMC UPMC)), special issue of the Journal of Physics: Condensed Matter “**Transport in Narrow Channels**”, to appear
- Co-editor (with Ralf Metzler (University of Potsdam, Germany) and Katja Lindenberg (University of California at San Diego), special volume “**Chemical Kinetics Beyond the Textbook**”, World Scientific Publishers, August 2018
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## Conferences and Workshops

- Co-organizer (with A. Rybko) of a Franco-Russian Workshop “**Stochastic Processes in Physics and Biology**”, Moscow, Russia, August 2009
- Member of the International Advisory Board, International Conference “**Reaction Kinetics in Condensed Matter**”, Moscow, Russia, September 2010.
- Co-organizer (with R. Metzler, O. Bénichou and I. Eliazar) of the International Workshop on “**Exploration and Search**”, Cargèse, Corsica, April 2011
- Member of the International Advisory Committee, International Conference “**Search and Stochastic Phenomena in Complex Physical and Biological Systems**”, Palma de Mallorca, Spain, May 2012.
- Member of the International Program Committee, International Conference “**Statistical Physics: Modern Trends and Applications**”, Lviv, Ukraine, July 2012.
- Co-organizer (with F. Seno, A. Stella, R. Metzler, I. Eliazar and O. Bénichou) of the International Workshop on “**Fluctuations in Small Complex Systems**”, L'Istituto Veneto di Scienze, Lettere ed Arti, Palazzo Cavalli-Franchetti, Venice, Italy, October 2012

- Co-organizer (with S. Dietrich, M. Popescu and M. Tasinkevych), International workshop “**Wetting and Capillarity in Complex Systems**», Max-Planck-Institute for Complex Systems, Dresden, Germany, February 2013
- Co-organizer (with R. Metzler, O. Bénichou and I. Eliazar), International Workshop on “**Exploration and Search III**”, Cargèse, Corsica, France, June 2013
- Co-organizer (with S. Dietrich, M. Popescu and M. Tasinkevych), Focused Working Group on « **Self-Propelled Micro-Objects** », Kavli Institute for Theoretical Physics, Santa Barbara, USA, March 2014
- Co-organizer (with D. Dean, D. Grebenkov and R. Metzler) of the Mini-Colloquium “**Statistical Challenges in Single-Particle Tracking**”, International Conference “Condensed Matter in Paris”, August 2014, Paris, France
- Member of the Scientific Committee, International Conference “**Reaction Kinetics in Soft and Condensed Matter**», Orléans, France, July 2014
- Co-organizer (with F. Seno, A. Stella, R. Metzler and T. Franosch) of the International Workshop on “**Fluctuations in Small Complex Systems II**”, L’Istituto Veneto di Scienze, Lettere ed Arti, Palazzo Cavalli-Franchetti, Venice, Italy, October 2014
- Co-organizer (with D. Wang and R. Sun) of the International Workshop on “**Stochastic Processes in Random Media**”, Institute for Mathematical Sciences, National University of Singapore, May 2015
- Co-organizer (with R. Metzler and I. Sokolov) of the International Workshop “**Anomalous Diffusion: Fundamentals & Models for Complex Systems**”, Bad Wildbad, Germany, October 2015
- Co-organizer (with F. Seno, A. Stella and R. Metzler) of the International Workshop on “**Fluctuations in Small Complex Systems III**”, L’Istituto Veneto di Scienze, Lettere ed Arti, Palazzo Cavalli-Franchetti, Venice, Italy, October 2016
- Member of the Scientific Committee, International Conference “**30<sup>th</sup> Marian Smoluchowski Symposium on Statistical Physics**“, Krakow, Poland, September 2017
- Member of the International Program Committee, International Conference “**Complex Systems**”, Cancun, Mexico, September 2017.
- Co-organizer (with F. Seno, A. Stella, R. Metzler, I. Vattulainen) of the International Workshop on “**Fluctuations in Small Complex Systems IV**”, L’Istituto Veneto di Scienze, Lettere ed Arti, Palazzo Cavalli-Franchetti, Venice, Italy, October 2018

## Refereeing

- Referee for Physical Review Letters, Physical Review A, B and E, PNAS, Journal of Chemical Physics, Institute of Physics Journals (JSTAT, Journal of Physics A and Condensed Matter), Soft Matter, Journal of Statistical Physics, Physics Letters, Physica A, Europhysics Letters, Chemical Physics, Langmuir, and etc
- External referee for the Danish Council for Independent Research
- External referee for the Israeli Science Foundation
- External referee for NORDITA
- External referee for FNRS (Belgium)
- External referee for the European Research Agency
- External referee The Netherlands Organisation for Scientific Research (NWO)

- Referee for the European Science Foundation

- External referee for the International Bureau of the German Federal Ministry of Education and Research at the Project Management Agency of German Aerospace Center (DLR)

## *Consulting*

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- 2003-2004 on wetting properties of carbon fibers, United Technologies Corporation, East Hartford CT USA
- 2007-2008 on stochastic search and evasion, DARPA and US Air Force OSR Project “Robust uncertainty management in search and surveillance”

## *Talks at Conferences (since 2000)*

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- Material Research Society Fall 2000 Meeting, Symposium T: Dynamics in Confined Geometries, Boston, USA, November 2000 (invited talk and symposium section chairman)
- CECAM Workshop on Statistical and Dynamical Aspects of Surface Reactions: Theory, Modeling and Experiments, Lyon, France, July 2000 (invited talk)
- TRI Princeton Workshop on Nanocapillarity and Wetting of Heterogeneous Systems, Princeton, USA, June 2001 (invited talk and conference section chairman)
- 21st IUPAP International Conference on Statistical Physics, Cancun, Mexico, July 2001 (contributed talk)
- 223d ACS Annual Meeting, Symposium on Friction and Dynamics in Submicron Confined Systems, Orlando, USA, April 2002 (invited talk and conference section chairman)
- International workshop on "Diffusion-Assisted Reactions", Seoul, Korea, August 2002 (invited lecture and conference section chairman)
- XXIII Meeting on Non-equilibrium Statistical Mechanics and Nonlinear Physics, Colonia del Sacramento, Uruguay, December 2002 (invited lecture)
- Symposium on Anomalous Dynamical Processes, Niels Bohr Institute - Nordita, Copenhagen, Denmark, May 2003 (invited lecture)
- Material Research Society Fall 2003 Meeting, Symposium T: Dynamics in Confined Geometries, Boston, USA, December 2003 (invited talk and symposium section chairman)
- Dynamics Days Asia-Pacific 3, Singapore, July 2004 (contributed talk)
- International Conference on Combinatorial Methods in Physics and Knot Theory, Moscow, Russia, February 2005 (invited lecture)
- Fluctuations and Noise, Symposium on Noise in Complex Systems and Stochastic Dynamics III, Austin, USA, May 2005 (invited talk)
- IX Latin American Workshop on Nonlinear Phenomena, San Carlos de Bariloche, Argentina, October 2005 (contributed talk)
- Frontiers in Chemical Kinetics, a workshop in honour of the 60<sup>th</sup> birthday of Joseph Klafter, Tel Aviv, Israel, May 2006 (section chairman)
- Complex and Stochastic Systems, Santander, Spain, June 2006 (invited talk)
- Isaac Newton Institute Workshop on First Passage and Extreme Value Statistics, Cambridge, UK, June 2006 (contributed talk)
- DARPA Caltech Meeting on Search and Surveillance, Pasadena, USA, January 2007 (invited talk)
- Fluctuations and Noise: Symposium on Noise in Complex Systems and Stochastic Dynamics, Florence, Italy, May 2007 (invited talk)
- DARPA Workshop on Search and Surveillance, Islamorada FL, USA, July 2007 (invited talk)
- Applied Probability Society INFORMS Meeting, Eindhoven, Holland, July 2007 (invited talk)
- Combinatorial Physics, Krakow, Poland, November 2007 (invited lecture)
- Max-Planck-Institute Stuttgart Workshop on “Physics of Fluctuations”, Germany, July 2008 (invited talk)
- Nordita Workshop on Movement and Search, Stockholm, Sweden, August 2008 (invited talk)
- New Paths for Random Walks, Cuernavaca, Mexico, January 2009 (invited talk)
- Workshop on Combinatorial Physics, Moscow, June 2009 (invited talk)

- International Workshop on Fluctuation-Induced Forces in Condensed Matter, Dresden, Germany, October 2010 (invited talk, section chairman)
- 36th Conference of the Middle European Cooperation in Statistical Physics, Lviv, Ukraine, April 2011 (contributed talk)
- International Workshop “Weak Chaos and Anomalous Dynamics”, Dresden, Germany, August 2011 (invited talk)
- International Workshop “NOLPA – Non-Linear Physics and Applications”, João Pessoa, Brazil, September 2011 (invited talk)
- International Workshop “Foundations and Applications of Non-Equilibrium Statistical Mechanics”, NORDITA, Stockholm, Sweden, September 2011 (invited talk)
- International Workshop “Search and Stochastic Processes in Complex Physical and Biological Systems”, IFISC, University of Balearic Islands, Palma de Mallorca, Spain, May-June 2012 (invited talk)
- International Workshop “Stochastic Transport and Reaction Processes in Condensed Media”, Jeju Island, Korea, July 2013 (invited talk)
- International Workshop “Physics and Visual Search”, Bellaterra, Barcelona, Spain, October 2013 (invited talk)
- International Workshop “Bose-Einstein Condensation and Quantum Chaos”, Institute for Advanced Studies, University of São Paulo, Brazil, March 30-April 2, 2015 (invited talk)
- 8<sup>th</sup> International Conference “Engineering of Chemical Complexity”, Garching (Muenchen), Germany, June 22 – 26, 2015 (invited talk)
- Workshop “Anomalous Diffusion in Biological Systems”, Korea Institute for Advanced Study, Seoul, Korea, September 3 – 5, 2015 (invited talk)
- 28<sup>th</sup> Marion Smoluchowski Symposium on Statistical Physics, Krakow, Poland, September 13-17, 2015 (invited talk)
- International Workshop “Anomalous Diffusion: Fundamentals & Models for Complex Systems”, Bad Wildbad, Germany, October 2015 (invited talk)
- International Workshop “Stochastic Modelling of Transport Processes in Biology”, School of Mathematics, University of Manchester, UK, March 2016 (invited talk)
- International Workshop “Quantifying Complex Transport with Lévy Walks: From Cold Atoms to Humans and Robotics”, Bad Honnef, Germany, May 2016 (invited talk)
- International Workshop “Stochastic dynamics: models and applications”, International Center for Advanced Studies, Buenos Aires, Argentina, March 2017 (invited talk)
- International Workshop “Anomalous Dynamics in Complex Systems”, Tampere, Finland, August 2017 (invited talk)
- International Workshop “Correlations, Fluctuations and anomalous transport in systems far from equilibrium”, Schwartz-Reisman Institute for Theoretical Physics at Weizmann Institute for Science, Rehovot, Israel, January 2018 (invited talk)

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### *Seminars (since 2000)*

- Physics Department, Boston University, USA, June 2000
- United Technologies Research Center, East Hartford, USA, July 2000
- TRI-Princeton, Princeton, USA, June 2001
- Max-Planck-Institute Stuttgart, Germany, June 2002
- Department, Imperial College London, UK, January 2003
- LPTMS, Orsay, France, June 2003
- Max-Planck-Institute Stuttgart, Germany, June 2004
- AIST, Tsukuba, Japan, November 2004 (three lectures)
- Kyoto University, Japan, November 2004 (two lectures)
- Waseda University, Tokyo, Japan, November 2004 (a course of lectures)
- Chemistry Department, Imperial College London, UK, December 2004 (a course of lectures)
- Max-Planck-Institute Stuttgart, Germany, April 2005
- Institute of Physical Chemistry, Polish Academy of Sciences, Warsaw, June 2006
- Institut Henri Poincare, Paris, December 2006
- AIST Tsukuba, Tsukuba, Japan, March 2007
- Porous Media Group, University of Paris V, May 2007

- Physics Department, Humboldt University, Berlin, July 2008
- Physics Department, UNAM, Mexico City, January 2009
- Dobrushin Mathematical Laboratory, Institute of the Information Transmission Problems RAS, Moscow, September 2009
- Institute of Physical Chemistry and Electrochemistry RAS, Moscow, December 2009
- Max-Planck-Institute Stuttgart, Germany, March 2010
- Max-Planck-Institute Stuttgart, Germany, November 2010
- University of Luxembourg, Luxembourg, October 2013
- Kavli Institute for Theoretical Physics, University of California at Santa Barbara, March 2014
- Department of Physics, Humboldt University Berlin, May 2014
- Max-Planck-Institute Stuttgart, Germany, July 2014
- Department of Physics, University of Potsdam, Germany, January 2015
- Department of Physics, University of Stuttgart, Germany, May 2016
- SAMM, Université Paris-1, December 2016
- Department of Physics, University of Saarlands, Germany, December 2017
- Department of Mathematics, Politecnico di Torino, Italy, January 2018

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## List of Publications

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A1 – A143 - research article (published, in press or submitted)

B1 – B9 - chapter in a book

C1 – C13 - conference proceedings with a peer review

**A1. Fluctuation-induced kinetics of incoherent excitations quenching,**

G. Oshanin, S. Burlatsky and A. Ovchinnikov

Physics Letters A **139**, 245 (1989)

**A2. Fluctuation-induced kinetics of reversible coagulation,**

G. Oshanin and S. Burlatsky

Journal of Physics A **22**, 973 (1989)

**A3. Fluctuation kinetics in systems with reversible recombination,**

S. Burlatsky, A. Ovchinnikov and G. Oshanin

Soviet Physics JETP **68**, 1153 (1989)

**A4. Fluctuation-induced kinetics of reversible reactions,**

G. Oshanin, S. Burlatsky and A. Ovchinnikov

Journal of Physics A **22**, 977 (1989).

**A5. Diffusion-controlled reactions with a polymer,**

S. Burlatsky, G. Oshanin and V. Likhachev

Soviet Journal of Chemical Physics **7**, 970 (1989)

**A6. Fluctuation induced kinetics of reactions on fractals with external sources,**

G. Oshanin, S. Burlatsky and A. Ovchinnikov

Physics Letters A **139**, 241 (1989)

**A7. Fluctuation kinetics of bimolecular reactions with external particles input,**

G. Oshanin, S. Burlatsky and A. Ovchinnikov

Soviet Journal of Chemical Physics **8**, 372 (1989)

**A8. Probability distribution of Rouse chain segment trajectories,**

S. Burlatsky and G. Oshanin

Theoretical and Mathematical Physics **75**, 473 (1989)



- A9. Influence of spatial fluctuations on the long-time recombination of particles with different mobilities,**  
G. Oshanin, A. Chernoutsan and S. Burlatsky  
Theoretical and Experimental Chemistry **26**, 12 (1990)
- A10. Many-particle kinetics of reversible polymerization,**  
G. Oshanin and S. Burlatsky  
Soviet Journal of Chemical Physics **9**, 718 (1990)
- A11. Diffusion-controlled reactions in polymer systems,**  
S. Burlatsky and G. Oshanin  
Physics Letters A **145**, 61 (1990)
- A12. Two dimensional model of trapping reactions with Gaussian coils,**  
G. Oshanin, A. Mogutov and S. Burlatsky  
Physics Letters A **149**, 55 (1990)
- A13. Direct energy transfer in polymer systems,**  
S. Burlatsky, G. Oshanin and A. Mogutov  
Physical Review Letters **65**, 3205 (1990)
- A14. Diffusive transfer of particles through disordered layers,**  
S. Burlatsky, G. Oshanin and S. Timashev  
Soviet Journal of Chemical Physics **9**, 1299 (1990)
- A15. Non-Fickian diffusive flow through disordered membranes,**  
G. Oshanin, S. Burlatsky and A. Chernoutsan  
Physics Letters A **149**, 47 (1990)
- A16. Diffusion-controlled deposition of dense lattice gas,**  
S. Burlatsky, G. Oshanin and M. Elyashevich  
Physics Letters A **151**, 538 (1990)
- A17. Kinetics of chemical short-range ordering in liquids and diffusion-controlled reactions,**  
S. Burlatsky, G. Oshanin and A. Ovchinnikov  
Chemical Physics **152**, 13 (1991)
- A18. Long-time kinetics of the quenching of incoherent excitations,**  
S. Burlatsky and G. Oshanin  
Soviet Journal of Chemical Physics **8**(3), 547 (1991)
- A19. Effects of reagent density fluctuations on the kinetics of reversible bimolecular reactions in non stoichiometric mixtures,**  
G. Oshanin  
Soviet Journal of Chemical Physics **8**(2), 395 (1991)
- A20. Directed walk in a one-dimensional lattice gas,**  
S. Burlatsky, G. Oshanin, A. Mogutov and M. Moreau  
Physics Letters A **166**, 230 (1992)
- A21. Non Fickian steady flux in a one-dimensional Sinai chain,**  
S. Burlatsky, G. Oshanin, A. Mogutov and M. Moreau  
Physical Review A **45**, R6955 (1992)
- A22. Steady flux in a continuous space Sinai chain,**  
G. Oshanin, A. Mogutov and M. Moreau  
Journal of Statistical Physics **73**, 379 (1993)
- A23. Behavior of transport characteristics in several one-dimensional disordered systems,**  
G. Oshanin, S. Burlatsky, M. Moreau and B. Gaveau

Chemical Physics **178**, 803 (1993)  
Special issue on "Transport in disordered media", eds.: G Zumofen, J Klafter and A Blumen.

**A24. Models of chemical reactions with participation of polymers,**

G. Oshanin, M. Moreau and S. Burlatsky  
Advances in Colloid and Interface Science **49**, 1 (1994)  
Special issue in honor of P. G. de Gennes, eds.: Th. F. Tadros and A. M. Cazabat

**A25. Anomalous steady-state properties of long-range bimolecular reactions,**

G. Oshanin, S. Burlatsky, E. Clement, D. Graff and L. Sander  
Journal of Physical Chemistry **98**, 7390 (1994)  
Special issue in honour of Raoul Kopelman

**A26. Rouse chain dynamics in layered random flows,**

G. Oshanin and A. Blumen  
Physical Review E **49**, 4185 (1994)

**A27. Dynamics and conformational properties of polymers in random layered flows,**

G. Oshanin and A. Blumen  
Macromolecular Theory and Simulations **4**, 87 (1995)

**A28. Polyampholytes in external electric fields: dynamics and conformation properties,**

H. Schiessel, G. Oshanin and A. Blumen  
Journal of Chemical Physics **103**, 5070 (1995)

**A29. Comment on "Pair and triple correlations in diffusion-limited  $A + B \rightarrow B$  reactions",**

S. Burlatsky, M. Moreau, G. Oshanin and A. Blumen  
Physical Review Letters **75**, 585 (1995)

**A30. Correlation induced non monotonic behavior of reversible chemical reactions,**

G. Oshanin, A. Mogutov, M. Moreau and S. Burlatsky  
Journal of Molecular Liquids **63**, 175 (1995)  
Special issue on "Chemical Kinetics and Reactions in Liquids", eds: H. Ratajczak and M. Moreau.

**A31. Influence of transport limitations on the kinetics of homopolymerization reactions,**

G. Oshanin and M. Moreau  
Journal of Chemical Physics **102**, 2977 (1995)

**A32. Direct energy transfer in solutions of ideal polymer chains,**

G. Oshanin, A. Blumen, M. Moreau and S. Burlatsky  
Journal of Chemical Physics **103**, 9864 (1995)

**A33. Smoluchowski approach for three-body reactions in one dimension,**

G. Oshanin, S. Luding, A. Stemmer and A. Blumen  
Physical Review E **52**, 5800 (1995)

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