

(Jun.-) Prof. Dassia Egorova

Juniorprofessur Theoretische Chemie
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Education:

January 2000 - December 2002 PhD studies at the Technical University of Munich,
Theoretical Physical Chemistry

February 2003 PhD degree in natural science (Doctor rerum naturalium)
with “magna cum laude” (very good)

PhD thesis *Modeling of Ultrafast Electron Transfer Processes: Multi-level Redfield Theory and beyond*,
published on-line at <http://mediatum.ub.tum.de>

September 1993 - June 1998 A.I. Herzen State Pedagogical University of Russia, St Petersburg,
Department of Physics, “Physics and English” branch,
specialization: theoretical quantum physics

June 1998 Diploma in physics,
Diploma thesis *Discrete Variable Representation in Quantum Mechanics (excellent)*,
state exam in English (*excellent*)

September 1996 - May 1997 University French College, St. Petersburg
French literature and history, sociology, philosophy, law

September 1991 - June 1993 St. Petersburg Pedagogical Complex “Creativity School”
emphasis at humanities, creative disciplines and pedagogics

September 1983 - June 1991 St. Petersburg primary and secondary school No 5
(with a focus at Chinese language)

Languages:

English	fluent
French	fluent
German	fluent
Spanish	fair
Russian	mother tongue

Fellowships and awards:

2009: Feodor-Lynen fellowship for experienced researchers (Alexander von Humboldt Foundation)

2003: Thomson Reuters “Essential Science Indicators” place the work
Modeling of ultrafast electron-transfer processes: validity of multi-level Redfield theory
to the top 1% within its field.

Career:

- since March 2010 Assistant professor for Theoretical Chemistry (“Juniorprofessur”)
Institute for Physical Chemistry, University of Kiel,
Olshausenstr. 40, D-24098 Kiel, Germany
• theochem.pctc.uni-kiel.de
- June 2009 -February 2010 Research associate at
Department of Chemistry, Northwestern University
(Feodor-Lynen fellow with Prof. T. Seideman)
2145 Sheridan Road, IL-60201, Evanston, USA
• simulations of nanoplasmonic devices for solar cells
- January 2000 - May 2009 Research associate at
Chair for Theoretical Chemistry, Technical University of Munich
(Prof. Dr. Wolfgang Domcke group),
Lichtenbergstr. 4, D-85747, Garching, Germany
• quantum dynamics of open systems;
nonlinear time-resolved spectroscopy
- May 1999 - December 1999 Research assistant at
Institute for Theoretical Chemistry, University of Dusseldorf
(Prof. Dr. Wolfgang Domcke group),
• modeling of ultrafast electron-transfer processes
- November 1998 - April 1999 Research assistant at
Institute for Atomic and Molecular Physics, University of Hanover
(Prof. Dr. Joachim Großer group),
Appelstr. 2, D-30167, Hannover, Germany
• low-energy atomic collisions (theory)
- September - December 1997 teacher for Physics, English, Astronomy at the
September - December 1996 secondary school No 181, St. Petersburg, Russia

Invited talks

1. December 6, 2006, Experimental Physics I, Würzburg University, Germany: *Two-dimensional electronic spectra for simple models with vibrations and dissipation*
2. August 22, 2008, Theoretical Chemistry, Dusseldorf University, Germany: *Detection of Coherent Dynamics in Molecular Systems by Time-resolved Nonlinear Spectroscopy: Computational Methods and Applications*
3. November 7, 2008, Theoretical and Physical Chemistry, Kiel University, Germany: *Detection of Coherent Dynamics in Molecular Systems by Time-resolved Nonlinear Spectroscopy: Computational Methods and Applications*
4. November 9, 2009, Theoretical Chemistry, Heidelberg University, Germany: *Detection of Coherent Dynamics by Two-dimensional Electronic Photon-Echo Spectroscopy*
5. May 18, 2010, FRIAS, Freiburg University, Germany: *Quantum coherence in photosynthesis: an attempt to rationalize and to interpret the spectacular observations*

6. July 1, 2010, Max-Planck Institute for Bioinorganic Chemistry, Mühlheim, Germany: *Quantum coherence in photosynthesis: an attempt to rationalize and to interpret the spectacular observations*
7. October 18, 2010, FRIAS-ICAM Exploratory Workshop on Nontrivial Quantum Effects in Biomolecular Systems, Anacapri, Italy: *Coherent oscillations in 2D photon-echo signals of photosynthetic complexes: detection and interpretation challenges*
8. November 15-16, 2010, MOLX 10: Molecules under X-ray pulses, Dresden, Germany: *N-wave mixing: efficient computational tools*
9. January 14, 2011, CFEL, Hamburg, Germany: *From four-wave to N-wave mixing: novel efficient computational schemes*
10. March 22, 2011, International Workshop on "Exciton Dynamics and Spectroscopy", Rostock, Germany: *Exciton dynamics probed by 2D photon-echo technique: Concepts and spectra simulations with EOM-PMA*
11. June 27, 2011, Faculty of Natural Sciences II, Halle-Wittenberg University, Germany: *Quantum Coherence in Chemistry and Biology: Can it Be Exploited?*
12. September 2011, Greg Engel group seminar, Department of Chemistry, University of Chicago, USA: *Efficient Computational Methods in Time-Resolved Nonlinear Spectroscopy*
13. August 30, 2012, International Workshop on "Exciton Dynamics and Spectroscopy", Rostock, Germany: *On the origin of oscillations in electronic 2D photon-echo signals: continued*
14. November 6, 2012, LEXI Symposium, Hamburg, Germany: *On the origin of oscillations in electronic 2D photon-echo signals: what coherences are they?*
15. July 9, 2013, Workshop "Quantum Dynamics and Spectroscopy in Condensed-Phase Materials and Bio-Systems" Telluride, USA: *On capabilities of two-dimensional electronic photon-echo spectroscopy to resolve coherent molecular dynamics: what the hell is oscillating?*
16. November 21, 2013, University of Copenhagen, Denmark: *Exploring Chemical Dynamics by Computational Time-resolved Spectroscopy*
17. December 10, 2013, University of Toulouse, France: *Efficient computational methods of time-resolved spectroscopy and illustrative applications*
18. February 18, 2014, Université Paris-Sud, Orsay, France: as in Toulouse
19. February 18, 2015, University of Potsdam (Germany): *Computational time-resolved spectroscopy as applied to ultrafast singlet fission in pentacene films*
20. June 11, 2015, Workshop Quantum Dynamics and Spectroscopy in Condensed-Phase Materials and Bio-Systems Telluride, USA: *Coherence as an analysis and detection tool of time-resolved spectroscopy*
21. November 16, 2015, University of Heidelberg (Germany): *Elucidation of vibronic coupling via coherence in time-resolved optical signals*
22. May 2016, Mendoza (Argentina), 9th International Conference on Photodynamics and Related Aspects
23. July 2016, Bad Honnef (Germany), WE-Heraeus-Seminar: From Photosynthesis to Photovoltaics: Theoretical Approaches for Modelling Supramolecular Complexes and Molecular Crystals