

Prof. Dr. Thomas M. Surowiec

Contact Information	Gärtnerstr. 1 10245 Berlin, Germany	<i>Office:</i> +49 30 2093 2630 <i>Mobile:</i> +49 157 714 65 533 <i>E-mail:</i> thomas.surowiec@gmail.com
Personal Information	Date of Birth: July 9, 1982 Place of Birth: Passaic, New Jersey, USA Marital Status: Not Married Children: No Children Name at Birth: Surowiec Citizenship: USA	
Professional Experience	April 2014- April 2009- April 2014 August 2006- April 2009 August 2004- May 2006 May 2005- August 2005 May 2001- August 2001	Assistant Professor (Juniorprofessur) in <i>Nonsmooth Optimization and Set-Valued Analysis</i> Institut für Mathematik Humboldt-Universität zu Berlin Research Associate (wiss. Mitarbeiter) Institut für Mathematik Humboldt-Universität zu Berlin Research Assistant Institut für Mathematik Humboldt-Universität zu Berlin Teaching Assistant Department of Mathematical Sciences Stevens Institute of Technology Hoboken, NJ USA Operations Consultant Aarhus United USA Port Newark, NJ USA Lab Assistant The Light and Life Laboratory Hoboken, NJ USA
Education	January 2010 May 2006 May 2004	Ph.D. (doctor rerum naturalium) <i>Mathematics</i> Institut für Mathematik Humboldt-Universität zu Berlin Master of Science. <i>Stochastic Systems Analysis and Optimization</i> Department of Mathematical Sciences Stevens Institute of Technology Bachelor of Science <i>Mathematical Sciences</i> Department of Mathematical Sciences Stevens Institute of Technology
Research Interests	Optimal Control of Variational Inequalities with Differential Operators Nonsmooth Optimization and Set-Valued Analysis PDE-Constrained Optimization and Equilibrium Problems Applications in Engineering, Finance, and Economics	

Presentations

Invited (Conferences)

On risk-averse PDE-constrained optimization using convex risk measures inspired by conditional value-at-risk

SIAM Conference on Computational Science and Engineering, Salt Lake City, 04.2015

Nonsmooth analysis and implicit programming approaches for optimal control problems governed by variational inequalities of the first and second kind,

Bilevel Optimal Control , Heidelberg, 10.2014

On the Optimal Control of a Class of Variational Inequalities of the Second Kind

SIAM Conference on Optimization, San Diego, 05.2014

Bundle-Free Implicit Programming Approaches for the Optimal Control of Variational Inequalities of the First and Second Kind,

6th International Conference on Complementarity Problems, Berlin, 08.2014

On a class of generalized Nash equilibrium problems in Banach space with applications to multiobjective PDE-constrained optimization,

ICCOPT 2013, Lisbon, 08.2013

A PDE-Constrained Generalized Nash Equilibrium Problem with Pointwise Control and State Constraints,

ISMP 2012, Berlin, 08.2012

A Bundle-Free Implicit Programming Approach for the Optimal Control of Variational Inequalities,

Free Boundary Problems (FBP) 2012, Chiemsee, 06.2012

On the Derivation of Optimality Conditions for Elliptic MPECs via Variational Analysis

IFIP TC 7, Berlin, 09.2011

A Bundle-Free Implicit Programming Approach for a Class of Elliptic MPECs,

OR 2011, Zürich, 08.2011

On the Derivation of Optimality Conditions for Elliptic MPECs via Variational Analysis,

SIOPT 2011, Darmstadt, 05.2011

Strong Stationarity Conditions for Elliptic Mathematical Programs with Equilibrium Constraints,

PARAOPT X, Karlsruhe, 09.2010

Analysis of M-stationary Points to an Electricity Spot Market EPEC,

ISMP 2009, Chicago, 08.2009

Invited (Colloquia)

Path-Following Methods for Generalized Nash Equilibrium Problem in Banach Spaces,
Universität der Bundeswehr München, Germany, 12.2014

A PDE-Constrained Generalized Nash Equilibrium Problem: Analysis and Numerics,
Mathematical Sciences Seminar, Stevens Institute of Technology, Hoboken, 09.2012

A Bundle-Free Implicit Programming Approach for a Class of Elliptic MPECs, Seminar des Fachgebiets Optimierung bei Partiellen Differentialgleichungen, Technische Universität Berlin, 01.2011

Mathematical Programs with Equilibrium Constraints in Function Spaces, Optimization and Applications Seminar, ETH Zürich and University of Zürich, 05.2011

Contributed

Some Structural Properties and Stationarity of Solutions to a Stochastic Spot Market EPEC, Conference on Optimization and Practices in Industry 2008, Paris, France 11.2008

Analysis of M-stationary Points and Solutions to an SEPEC Modeling Oligopolistic Competition, CARIPLO Workshop on Numerical Linear and Nonlinear Stochastic Programming, Edinburgh, Scotland, UK 09.2008

On the Coderivative of the Normal Cone Mapping to Non-Polyhedral Sets, ECMI 2008, London, UK 07.2008

Conference Organization

Currently planning (with G. Wachsmuth) a two-part minisymposium on *Optimization and Control of Nonsmooth and Complementarity-Based Systems: Theory and Numerics* at the IFIP TC7 Conference 2015 in Sophia-Antipolis.

Co-organized (with M. Hintermüller) a two-part minisymposium titled *Variational Inequalities and MPECs in Function Space: Analysis, Numerics, and Applications* at the IFIP TC7 Conference 2011 in Berlin.

Co-organized (with M. Hintermüller) a three-part minisymposium titled *(Quasi) - Variational Inequalities, Complementarity Problems and MPECs* at the SIAM Conference on Optimization 2011 in Darmstadt.

Co-organized (with M. Hintermüller) the *International Conference on Complementarity Problems* at HU Berlin August, 2014.

Large-Scale Research Projects

Co-Principal Investigator (with M. Hintermüller, A. Mielke, M. Thomas) for the Einstein Center for Mathematics Project OT1 "Mathematical Modeling, Analysis, and Optimization of Strained Germanium-Microbridges"

Member of DFG Research Center MATHEON Project C28 "Optimal Control of Phase Separation Phenomena" (05.2009-2013)

Member of DFG Priority Program SPP 1253 "Optimization with Partial Differential Equations" within the project "Elliptic Mathematical Programs with Equilibrium Constraints (MPECs) in Function Space: Optimality Conditions and Numerical Realization" (05.2009-)

Former Doctoral Candidate in DFG Graduiertenkolleg (Research Training Group) 1128 "Analysis, Numerics and Optimization of Multiphase Problems" (08.2006-08.2009)

Teaching Experience

Humboldt-Universität zu Berlin, Berlin, Germany

Lectures

Real Analysis for Physicists, Winter Semester (WS) 2014
Variational Inequalities, Summer Semester (SS) 2014
Nonlinear Optimization, SS 2013

Recitations

Linear Algebra, WS 2012/2013
Real Analysis I, SS 2012
Real Analysis I, WS 2011/2012
Real Analysis II, SS 2011
Applied Mathematics for Computer Scientists, WS 2010/2011
Real Analysis II, SS 2010
Real Analysis I, WS 2009/2010

Stevens Institute of Technology, Hoboken, New Jersey USA

Recitations

Calculus IV, Spring Semester (SpS) 2006
Calculus I, Fall Semester (FS) 2005/2006
Calculus II, SpS 2005
Calculus I, FS 2004/2005

Advising & Supervision

Humboldt-Universität zu Berlin, Berlin, Germany

Supervision and Second Reviewer

Julius Seiberl, B.S. Mathematics (with M. Hintermüller), 11.2012
Daniel Zechlin, B.S. Mathematics (with M. Hintermüller), 05.2012
Jennifer Rasch, M.S. Mathematics (with M. Hintermüller), 07.2012
Tobias Keil, M.S. Mathematics (with M. Hintermüller), 06.2013
Adrian Kämmler, M.S. Mathematics (with M. Hintermüller), 01.2014
Andrea von Schirp, M.S. Mathematics (with M. Hintermüller), 06.2014
Robert Patho, Ph.D. Mathematics (Charles University Prague), (*2nd* Rr.), 11.2014
Philipp Heltzel, B.S. Mathematics, (tentative) 12.2014
Magdalena Nöth, M.S. Mathematics, (tentative) 2015
Andrea von Schirp, Ph.D. Mathematics (with M. Hintermüller), (tentative) 2018

Stipends, Awards, Etc.

Stipends

Member of DFG Research Training Group 1128 “Multiphase Problems”,
08.2006-05.2009
Teaching Assistantship, Department of Mathematics, Stevens Institute of Technol-
ogy, 08.2004-05.2006

Scholarships

ECE/NSF Undergraduate Research Scholarship, 2002-2003
The Charles L. Petchek Scholarship, 2003
Stevens Technogenesis Summer Research Program, 06.2003-08.2003
Stevens Technogenesis Summer Research Program, 06.2002-08.2002
Stevens Institute of Technology University Scholarship, 2000-2004

Languages

English (native-speaker)
German (fluent)
talian (basic knowledge)