

## Curriculum Vitae

Olga Brezhneva

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### Research Interests

Optimization, numerical analysis

### Education and Degrees

Nov. 2000 *Ph.D. in Mathematics*, Russian Academy of Sciences, Computing Center, Moscow  
Ph.D. Thesis: The Construction of Methods for Solving Degenerate Problems on the Basis of Factor-Analysis of Nonlinear Mappings  
Ph.D. Advisor: Professor A. A. Tret'yakov

June 1990 *MS in Applied Mathematics* (Summa Cum Laude), Moscow State University,  
Department of Computing Mathematics and Cybernetics

### Employment

2002–present *Postdoctoral Associate*, Institute for Mathematics and its Applications (IMA),  
University of Minnesota

1997–2002 *Research Scientist*, Russian Academy of Sciences, Computing Center,  
Department of Nonlinear Analysis, Moscow

1993–1996 *Junior Research Scientist*, Russian Academy of Sciences, Institute of High-Performance  
Computer Systems, Department of Applied Mathematics, Moscow

1990–1993 *Research Fellow*, Russian Academy of Sciences, Institute of Cybernetics Problems, De-  
partment of Numerical Analysis, Moscow

### Grants

2001 Singular Solutions of Nonlinear Problems: Theory, Numerical Methods and Applications,  
Russian Foundation for Basic Research, #01-01-00810 (with Izmailov A.F. co-PI)

2000 New Methods and Models for Solving Nonlinear Problems with Approximate Information,  
Russian Foundation for Basic Research, #00-01-00294 (with Tret'yakov A.A. co-PI)

1999 Methods for Solving Nonlinear Degenerate Problems, Russian Foundation for Basic Re-  
search, #99-01-00472 (with Karmanov V.G., Tret'yakov A.A., co-PI)

### Awards and Honors

1990 Graduated with “Excellence” Diploma (Summa Cum Laude) from Moscow State Univer-  
sity (MSU); top 10% of a class

1990 2nd place, MS Thesis Competition, MSU

1989 2nd place, Course Work Competition, MSU

1988, 1989 Lenin Undergraduate Fellowship, MSU; top 1% in a class of 400

1987 Joliot-Curie Undergraduate Fellowship, MSU; top 1% in a class of 400

1985 Graduated from High School with Gold Medal (Russian Governmental Award)

## Invited Talks and Presentations

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| Jan 2004  | IMA Postdoc Seminar, University of Minnesota  |
| Jan 2004  | The American Mathematical Society Meeting, Phoenix  |
| Aug 2003  | 18th International Symposium on Mathematical Programming, Copenhagen  |
| Nov 2002  | Applied Mathematics and Numerical Analysis Seminar, joint with Computational Optimization Seminar, School of Mathematics, University of Minnesota |
| Oct 2002  | P.D.E. Seminar, School of Mathematics, University of Minnesota  |
| Jul 2001  | Fifth SIAM Conference on Control and Its Applications, San Diego  |
| May 2001  | Department of Mathematics and Physics, University of Podlasie, Siedlce, Poland  |
| Fall 2000 | Department of Computing Mathematics and Cybernetics, Moscow State University  |

## Teaching Experience

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| 2003      | Lecturer for Multivariable Calculus (Calculus III), School of Mathematics, University of Minnesota   |
| 1998–2001 | Instructor for graduate students of Moscow State University during their practice at Computing Center of Russian Academy of Sciences; Nonlinear programming, Functional Analysis   |
| 1986–1989 | Instructor for mathematics classes for gifted high school students (an outreach program of the Department of Computing Mathematics and Cybernetics, MSU); Algebra, Calculus and Analytical Geometry at the undergraduate level |

## Service

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|--------------|---|
| Aug 2003     | Organizer and chair of the session “Algorithms for Degenerate Nonlinear Optimization” at the 18th International Symposium on Mathematical Programming, Copenhagen |
| 2002–2003    | Organizer of the IMA Postdoc Seminar, University of Minnesota   |
| 2002–present | Reviewer for ICCSA conferences  |
| 2003–present | Organizer of social events for the IMA, University of Minnesota   |

## Professional Societies

- Society for Industrial and Applied Mathematics, SIAM
- Mathematical Programming Society, MPS