ANDREY SHILNIKOV

Department of Mathematics and Statistics Georgia State University, Atlanta, GA 30303-3083

EDUCATION:

Ph.D. in Mathematics, University of Nizhny Novgorod, 1991 (thesis advisor: V. Belykh) B.S. in Physics and Mathematics, University of Nizhny Novgorod, 1984

PROFESSIONAL EXPERIENCE:

2000-present	Assistant Professor, Dept. of Mathematics and Statistics, GSU
1999-2000	Visiting Assistant Professor, Cornell University
1998 – 1999	Research Scientist, UC Berkeley
$1998-1998\frac{1}{2}$	Visiting Assistant Professor, Georgia Tech
1996 – 1998	Research Scientist, UC Berkeley
1993 - 1998	Senior Research Scientist, Inst. for Applied Mathematics, N.Novgorod, Russia

ACADEMIC HONORS:

The Royal Society Post-doctorate Fellowship, UK 1994

GRADUATE AND POSTDOCTORAL ADVISING (in past 5 years):

None

CURRENT RESEARCH SUPPORT:

INTAS "Numerical Methods for Local and Global Bifurcations"

OTHER COLLABORATORS (in past 48 months):

L. Shilnikov, D. Turaev, L. Chua, N. Rulkov, Y. Kuznetsov, C. Niclis, G. Nicolis, N. Gavrilov, V. Pisarevsky

SELECTED PUBLICATIONS:

- 1. "Bifurcations of the Lorenz-like Attractors in the Marioka-Shimizu System", *Physica* **D62**, 338 (1993)
- 2. "Normal Forms and Lorenz Attractors", (with L. Shilnikov and D. Turaev) Bifurcations and Chaos **3**(5), 1123 (1993)
- 3. "On the Boundaries of the Region of Existence of the Lorenz Attractor", Selecta Mathematics Sovietica 11(4), 375 (1992)
- 4. "Homoclinic Phenomena in Three-level Laser Models", Computers Math. Applications **34**(2-4), 245 (1997)
- 5. "Asymptotic Normal Forms for Equilibria with a Triplet of Zero Characteristic Exponents in Systems with Symmetry", *Chaotic and Regular Dynamics* 4, 123 (1998)
- 6. "Bifurcation and Predictability Analysis in a Low-order Atmospheric Circulation Model" (with C. Nicolis and G. Nicolis), Bifurcations and Chaos **5**(6), 1701 (1995)
- 7. "An Example of a Blue Sky Catastrophe" (with N. Gavrilov), Amer. Math. Soc, Transl. 2, 200 (2000)
- 8. "Methods of Qualitative Theory in Nonlinear Dynamics, Parts I and II" (with L. Shilnikov, D. Tuarev, and L. Chua), World Scientific Publisher, (1998 and 2001)