Curriculum Vitae

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POSITION
Researcher
Department of Mathematics
University of California, Irvine
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EDUCATION AND DEGREES
May 1985, Doctor of Sciences in Mathematics and Physics
awarded at Leningrad branch of Steklov Mathematical Institute of Academy of Sciences of USSR,
May 1976, PhD in Differential Equations in Department of Mathematics and Mechanics, Moscow State University.
June 1972, MS in Mathematics, Diploma in Mathematics with honours degree, Moscow State University

TEACHING AND RESEARCH EXPERIENCE

Aug. 1997- Aug. 1998 Visiting Professor – Department of Mathematics, UNC in Charlotte, Charlotte, North Carolina
Jan. 1997-May 1997 Visiting Principal Research Scientist – Center for Dynamical Systems and Nonlinear Studies, Georgia Institute of Technology, Atlanta, Georgia
Aug. 1996- Dec. 1996 Visiting Professor – Department of Mathematics, Arizona State University, Tempe, Arizona
Aug. 1995-May 1996 Visiting Professor – Department of Mathematics, UNC in Charlotte, Charlotte, North Carolina
Jan. 1995-May 1995 Visiting Professor – Department of Mathematics, Arizona State University, Tempe, Arizona
1986 to Aug. 1998 Professor – Division of Computational Mathematics, Moscow State University of Communications (MIIT)
1980 to 1986 Associate Professor – Division of Higher Mathematics, MIIT
1975 to 1980 Assistant Professor – Division of Higher Mathematics, MIIT

PUBLICATIONS
More than 90 articles and 2 books published. Publications most relevant to the proposed research:

1. Asymptotic expansion at infinity of a strongly perturbed Poiseuille flow, in *Advances of Soviet Mathematics*, v.10, Amer. Math. Soc., Providence, 1992, pp.1-83.

2. Attractor of Navier-Stokes system in an unbounded channel-like domain, *J. of Dynamics and Differential Equations*, vol. 4, no. 4, (1992), 555-584.

3. A. Babin, A. Mahalov, and B. Nicolaenko (1996), Global splitting, integrability and regularity of 3D Euler and Navier-Stokes equations for uniformly rotating fluids, *Europ. J. of Mech., B/Fluids*, **15**, No. 3, 291–300.

4. A. Babin, A. Mahalov, and B. Nicolaenko (1996), Resonances and regularity for Boussinesq equations, *Russian J. Math. Phys.*, **4**, No. 4, 417–428.

5. A. Babin, A. Mahalov, and B. Nicolaenko (1997), Global regularity and integrability of 3D Euler and Navier-Stokes equations for uniformly rotating fluids, *Asymptotic Analysis*, **15**, 103–150.

6. A. Babin, A. Mahalov, and B. Nicolaenko (1997), Global splitting and regularity of rotating shallow-water equations, *Eur. J. Mech., B/Fluids*, **16**, no. 1, 725–754.

7. A. Babin, A. Mahalov, and B. Nicolaenko (1998), On the Nonlinear Baroclinic Waves and Adjustment of Pancake Dynamics, *Theoretical and Computational Fluid Dynamics,* **11**, pp. 215-235 (1998).

Other selected recent papers

1. (with V. Afraimovich and S.-N. Chow) Spatial chaotic structure of attractors of reaction-diffusion systems, *Transactions Amer. Math. Soc.* 348, no. 12, pp. 5031-5063 (1996)

2. Inertial Manifolds for Travelling-Wave Solutions of Reaction-Diffusion Systems, *Comm. Pure Appl. Math.* v. 48 (1995), p. 167-198.

3. (with L. Bunimovich) Dynamics of stable chaotic waves generated by hyperbolic PDE, *Nonlinearity*, **9** (1996) p. 853-875.