# CURRICULUM VITAE

Family name : Bolsinov First name : Alexey

Date of birth : August 13, 1962 Place of birth : Moscow, Russia

Nationality : Russian

Marital status : Married, have two children
Permanent position : Reader in Mathematics
Permanent professional : School of Mathematics
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Languages : Russian (native)

English and French

#### Education

1979-1984 Student, Dept. of Mechanics and

Mathematics, Moscow State University

Diploma in Mathematics with honours, June 1984

1984-1987 PhD student, Dept. of Mechanics and

Mathematics, Moscow State University.

PhD in mathematics, June 1988

# Habilitation

April, 1995 Doctor of Sciences in Mathematics, Moscow State University

## Occupation

Since February 2006 Reader in Mathematics

School of Mathematics Loughborough University

1997-2006 Professor,

Chair of Differential Geometry and Applications,

Moscow State University

Russia

March 2000 - June 2000 Visiting Professor

Sept. 2001 - Dec. 2001 (professeur associé à temps partiel),

Sept. 2002 - Dec. 2002 Université Montpellier II,

France

October 2000- Visiting Professor, February 2001 Universität Freiburg,

Germany

1987-1997 Research fellow, assistant professor,

associated professor

Dept. of Math. and Mech. Moscow State University

Russia

#### Research areas

Geometry, Lie algebras, Dynamical Systems, Integrability.

# Professional Memberships

- member of the Dissertation Council of Department of Mechanics and Mathematics, Moscow State University;
  - member of the Scientific Council of Moscow State University (2000-2006);
- member of the Expertise Council in Mathematics and Mechanics of the Higher Attestation Committee of the Russian Federation (2002-2005);
  - member of the Editorial board of "Regular and Chaotic Dynamics";

#### Awards

Shuvalov prize for young scientists, Moscow State University, 2000.

## Teaching experience

# a) Courses of lectures

Loughborough University	
— "Abstract Algebra"	2006 - 2007
— "Linear Algebra"	2007
Moscow State University (Russia)  — "Differential geometry and topology"  — "Lie groups and Lie algebras"  — "Riemannian geometry and curvature"  — "Introduction to the topology of dynamical systems"	1995 - 2003 1996 - 2005 1998 2002
Universität Freiburg (Germany) — "Differential geometry"	2000 - 2001
Université Montpellier II (France) — "Analysis", first year	2001
Tokyo University (Japan)  — "Topological modelling for visualization", minicours	1993

# b) Supervision of students and post-graduate students

- at present: supervision of four students (Moscow State University) and three PGR students (Moscow State University (2) and Loughborough University (1))
  - six of my PGR students defended PhD theses:
- V. Matveev (1997) "Momentum map singularities and topological structure of integrable geodesic flows";
- A. Skopenkov (1997) "Criteria for embeddability of compacts and polyhedra into Euclidean spaces";
  - V. Kalashnikov (1999) "Singularities of integrable Hamiltonian systems";
- D. Zotiev (2002) "Fomenko–Zieschang invariant for the Bogoyavlenskii integrable case".
- Yu. Brailov (2004) "Geometry of singularities of integrable systems on Lie algebras".
  - N.Korovina (2006) "Geometry of integrable cases in rigid body dynamics".

#### Administrative duties

- scientific secretary of the Chair of Differential Geometry and Applications, Moscow State University (1993–2000);
- head of the laboratory of Computer Methods in Natural and Human Sciences (2000-2006).
- member of the Acadenmic Steering Committee of MAGIC consortium (Mathematics Access Grid Instruction and Collaboration), Loughborough University

### Research activity

Invited speaker at international conferences, in particular:

International Topological Conference (Moscow, Russia, May-June, 1996) plenary talk;

International Conference dedicated to the 100th birthday of I.G.Petrovskii (Moscow, Russia, May 2001);

Conference on "Geometry of infinite dimensions and applications to the field theory" (CIRM, Marseille, France, 2002);

XIIth Conference on Geometrical Methods in Physics (Byalostok, Poland, June 2003), plenary talk;

Workshop "Contemporary Geometry and Related Topics" (Belgrade, Serbia, May 2002);

9th Conference on Differential Geometry and its Applications (Prague, August 2004);

Summer School and Conference on Poisson Geometry (ICTP, Trieste, Italy, July 2005);

Conference "Dynamical Integrability" (CIRM, Marseille, France, November 2006);

Conference "Geometry of Integrable Systems" (Hanoi, Vietnam, April 2007).

# Research visits:

Ruhr Universität Bochum (Germany) Aizu-Wakamatsu University (Japan) Université Montpellier II (France) Universität Bremen (Germany) Max-Planck-Institut, Bonn (Germany) Queen's University, Kingston (Canada) Loughborough University (UK) Freiburg Universität (Germany)

Institut Fourier, Grenoble (France)

December 1993, November 1994 September 1995 May 1996 January 1996, November 1998 July 1996, August 1998 April 1998 October 2001, December 2002 March – June 2004 October–December 2005

March 2005, June 2005

#### Grants:

Principal investigator of RFFI grants (Russian Foundation for Basic Research):

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96-15-96868 (1996 – 1998), 99-01-01249 (1999 – 2001), 00-01-14004 (2000), 01-01-14111 (2001), 00-15-99272 (2000 – 2002), 02-01-00988 (2002 – 2004), 05-01-00978 (2005 – up to now)
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### Research interests

Symplectic geometry and Poisson manifolds: symplectic and topological invariants of Lagrangian foliations, compatible Poisson structures.

Topology of dynamical systems and integrability: topological entropy, obstructions to integrability, integrable tops, bi-Hamiltonian systems.

Singularities: singularities of the momentum mapping, their invariants and algorithmic classification.

Riemannian geometry and Lie groups: projective equivalence, geodesic flows on Lie groups and homogeneous spaces, symmetries and reduction, Lie pencils.