SERGEI YAKOVENKO

Curriculum Vitæ

PERSONAL

Date/place of birth	June 2, 1960; Moscow, Russia (former U.S.S.R.)
Citizenship	Russia, Israel
Home address	3, Meonot Wix
	Rehovot 76100 Israel
Position	Full Professor,
	Department of Mathematics,
	The Weizmann Institute of Science, Israel.
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PROFESSIONAL

Education

Ph.D. 1984–1986, Institute of Control Sciences (Pure Mathematics).

M.Sc. 1976–1981, Moscow State University, Department of Mathematics and Mechanics, *magna cum laude*.

Positions (in the reverse time order)

2003–	Full Professor, the same department
2005–2014	Head, Department of Mathematics, The Weizmann Institute of Science
1996–2003	Associate Professor, the same department.
1992–1996	Senior Scientist, the same department.
1991–1992	Scientist, the same department.
1989–1991	Senior research fellow, Institute of Control Sciences (ICS). Head of the research group in mathematical economics.
1985–1989	Research fellow, ICS.
1981–1985	Junior research fellow, ICS.

Updated May 2017

Awards, grants and scholarships

• The Israeli Science Foundation Grant 493/09 "Foliations over rational numbers and Hilbert 16th problem" (2009–2013).

• Elliot Distinguished visitorship (January 1, 2009 till April 30, 2009) at the Fields Institute, Toronto ON, Canada (within the framework of the Thematic Program on o-minimal structures and real analytic geometry).

• Minerva Foundation grant (2005–2007)

• The Israeli Science Foundation Grant 18/00-1 "Zeros of functions defined by ordinary differential equations and tangential Hilbert 16th problem" (2000–2003).

• Iberdrola scholarship (Visiting professorship, Spain), 1999.

• M. Levinson prize in Mathematics for works on the Hilbert 16th Problem (1997).

• Minerva Foundation grant (1993-1995)

Participation in Boards

Associate Editor, *Qualitative Theory of Dynamical Systems*.

Member of ISF review panel in mathematical sciences (twice).

Past: *Journal of Dynamical and Control System*, Member of the Editorial Board

Visiting positions

2014 Universita di Pisa (3 months), Universita di Roma Tor Vergata (1 month)
2009 Université Rennes I, France (2 months)
2009 Fields Institute, Toronto, Canada (4 months)
2008 Instituto de Matematica Pura e Applicada, Rio de Janeiro, Brazil (3 weeks)
2007 Université de Rennes I, France (1 month)
2006 Cornell University, Ithaca, US (1 month)
2006 Peking University, Beijing, China (1 month)
2005 Cornell University, Ithaca, US (1 month)
2004 Université de Bourgogne, Dijon, France (1 month)
2003 Université Paul Sabatier, Toulouse, France (1 month)
2002 Cornell University, Ithaca NY (1 month);
2001 Steklov Institute of Mathematics, Moscow (3 months);
2000 University of Toronto, Canada (sabbatical leave, 4 months);
1999 Universidad de Valladolid, Spain (Iberdrola Professor, 3 months);
1998 Independent University of Moscow, Russia (sabbatical leave, 7 months);
1998 Chercheur associe à CNRS, Université Paris-6, France (4 months);
1997 Fields Institute for research in Mathematical Sciences, Toronto, Canada (2 months);
1995 Independent University of Moscow, Russia (sabbatical leave, 4 months);
1995 Université Paul Sabatier, Toulouse, France (1 month);
1994 Université de Bourgogne, Dijon, France (1 month);
1994 Université de Montreal, Montreal, Quebec, Canada (1 month).

Fields of Interest (all in Pure Mathematics)

Analytic theory of ordinary differential equations
Limit cycles and Hilbert 16th problem
Foliations

Dynamical systems
Singularity theory

Publications

Over 48 publications in refereed journals and collections (listed separately).

Participation in international conferences (all with invited or panel talks), principal colloquium talks.

2017 Holomorphic foliations in Alsace: A singular journey from locality to globality, Strasbourg, France

2017 Galois Meets Newton: Algebraic and Geometric aspects of Singularity Theory (Khovanskii–70, organizer), Rehovot, Israel

2017 Geometry of Singularities and Differential Equations (F. Cano–60), Santander, Spain

2017 Memorial conference on spectral theory of partial differential operators, Mittag–Leffler Institute, Stockholm, Sweden

2017 O-Minimality and its Applications to Number Theory and Analysis, Oberwolfach workshop, Germany

2016 Journées Louis–Antoine, Rennes, France

2016 Geometric Aspects of Modern Dynamics, O Porto, Portugal

2015 Geometries in action (Ghys–60), Lyon, France

2015 Géométrie analytique réelle et trajectoires de champs de vecteurs, Luminy, France

2015 Colloquium talk, Vienna University, Austria

2015 Resurgence, Physics and Numbers, CRM, Pisa, Italy

2014 KAWA-NORDAN, Luminy, France

2014 Attractors, Foliations and Limit Cycles (Ilyashenko–70, organizer), Moscow, Russia

2013 Recent progress in the theory of Painlev equations, Strasbourg, France

2013 Applications of O-Minimality to Analysis and Number Theory, Passau, Germany

2013 Complex Geometry, Trento, Italy

2013 Colloquim talk, Comenius University, Bratislava, Slovakia

2013 Seminar on Dynamical Systems, Imperial College, London, UK

2012 New Trends in Dynamical Systems (Llibre–60), Tarragona, Spain

2012 New trends in holomorphic dynamics, Cortona, Italy

2012 International conference on Algebra and Geometry (Khovanskii–65), Moscow, Russia

2011 Colloquium talk, Comenius University, Bratislava, Slovakia

2011 Economic Dynamics and Equilibrium (Polterovich-fest, High School of Economics, Moscow)

2010 Singularities and Foliations (Mattei–60), Toulouse, France

2010 Almost Complex Geometry and Foliations (Lille, France)

2010 ESF Conference on Algebraic Methods in Dynamical Systems (Singer–60), Bedelwo, Poland

2009 Asymptotics in dynamics, geometry and PDEs; generalized Borel summation. Centro di Giorgi (Pisa, Italy)

2009 Complex Geometry and Dynamics (Luminy, France)

2009 Bifurcations and Limit Cycles (Luminy, France)

2009 Joint Boston area colloquium (Harvard–MIT–NEU–Brandeis)

2009 Joint Montreal Colloquium (U. de Montréal–UQAM–Concordia)

2009 Colloquia in Michigan State U., Northwestern U., SUNY Stony Brook, Cornell, U. of Toronto, McMaster U.

2008 Global and local aspects of holomorphic foliations (Lins-Fest), Rio de Janeiro, Brazil

2007 Analysis and singularities (Arnold–70), Moscow, Russia

2007 Dynamics in perturbations (Dumortier–60), Hasselt University, Belgium

2007 Rigidity in dynamics and geometry (Luminy, France)

2006 Bifurcation theory and related topics (Peking University, Beijing, China)

2006 Differential equations and singularities (Tordesillas, Spain)

2006 Limit Cycles of Differential Equations (Barcelona, Spain)

2004 Théories asymptotiques et équations de Painlevée (Angers, France)

2004 Bifurcations, Limit Cycles and Analytic Foliations (Luminy, France)

2003 "The Hilbert Sixteenth and Related Problems in Dynamics, Geometry and Analysis" (Moscow, Russia)

2002 New Directions in Dynamical Systems (Kyoto, Japan)

2002 Colloquium talk, Beijing University, China.

2002 Normal forms, Bifurcations and Finiteness Problems in Differential equations (NATO Workshop, Montreal, Canada).

2001 CBMS Conference on Normal Forms (Columbia, Missouri)

2001 Colloquium talk, Moscow Mathematical Society.

2000 Colloquium talks in University of Wisconsin (Madison), Ohio State University (Columbus), Cornell University (Ithaca, NY), University of Maryland (College Park, MD).

2000 Workshop "Asymptotic series, differential algebra and finiteness theorems" (Montreal, 2000)

1999 Annual meeting of Canadian Mathematical Society, Montreal, Canada

1999 Limit cycles and Hilbert 16th problem, Luminy, France

1999 Workshop on Singularity Theory, Warwick, England

1998 Local differentiable dynamics, Diepenbeek, Belgium

1997 (a) Complexity in Geometry, (b) Arnoldfest. Fields Institute for research in Mathematical Sciences, Toronto, Canada

1996 Colloquium talk, Moscow Mathematical Society.

1995 Singularities in Differential Equations and Pfaffian systems, Banach International Mathematical center, Warsaw, Poland;

1995 Geometry of Differential Equations, Luminy, France

1995 Workshop on Dynamical Systems, Trieste, Italy;

1994 Workshop on Real and Analytic geometry and Hilbert 16th problem, Luminy, France;

1994 International Conference on quantum chaos and complex dynamical systems, Moscow, Russia;

1993 International Conference on Dynamical systems, Rio de Janeiro, Brasil;

1993 Conference on periodic orbits of vector fields, Lumini, France;

1993 Chaos–V, fSU-American workshop on chaotic dynamics, Woods Hole, U.S.

1993 Annual meeting of Israeli Mathematical Union, Beer-Sheba, Israel;

1992 Workshop on dynamical systems, Porto, Portugal;

1992 German-Israeli conference on applied and applicable analysis, Gosen, Germany;

1992 Bifurcations and limit cycles of vector fields, NATO Advanced Studies Instiute Conference, Montreal, Canada;

1992 Workshop and summer school on dynamical systems, Trieste, Italy;

1991 Workshop on holomorphic dynamics, Guanajuato, Mexico;

1991 Workshop and summer school on dynamical systems, Trieste, Italy

1991 Chaos–III, Soviet-American workshop on chaotic dynamics, Woods Hole, U.S.

Teaching courses

Annual and semester graduate and postgraduate courses.

2010– Mathematical Analysis for High School Teachers (Caesaria–Rothschild programme, Weizmann Institute)

1992– Calculus on Manifolds, Local theory of ordinary differential equations, Topics in Geometry and Analysis, Differential Geometry, Analytic theory of Differential Equations (The Weizmann Institute).

2000 Calculus-1 (Dept. of Engineering, Toronto U.)

1988–1992 Foundations of Mathematical Economics, Dynamic optimization optimization and convex variational problems (Institute of Control Sciences).

Courses delivered on schools, minicourses.

2015 Analytic theory of differential equations (U. di Pisa).

2009 Normal forms and limit cycles of analytic differential equations (Fields Inst., Toronto)

2006 Algebraic leaves of polynomial foliations (CRM, Barcelona)

2004 Quasialgebraicity of Picard–Vessiot extensions and the Riemann–Hilbert problem (Institut de mathématiques de Bourgogne, Dijon)

2002 Flat meromorphic connections with logarithmic poles (CRM, Montreal)

2001 Quasialgebraic function fields (Steklov Inst., Moscow)

2000 Quantitative theory of differential equations (U. of Toronto, Canada).

1999 Tangential Hilbert problem (U. de Valladolid, Spain).

1998 On functions and curves defined by differential equations, School on local differentiable dynamics (Diepenbeek, Belgium, within the European TMR program).

1994 Abelian integrals, Fuchsian equations and Bernstein classes (Dijon, October 1994).

1992 Normal forms, bifurcations and Hilbert–Arnold problem (Trieste school on Dynamical systems, Trieste, May 1992) — together with Yu. S. Il'yashenko.

1991 Analytic theory of Ordinary differential equations (Trieste school on Dynamical systems, Trieste, September 1991) — together with Yu. S. Il'yashenko.

1991 Hilbert–Arnold problem for elementary polycycles (Guanajuato Workshop on Holomorphic Dynamics, Guanajuato, Mexico, February 1991).

Numerous talks on Israeli Mathematical Union annual meetings and All-(Soviet)-Union conferences in 1982-2002.

Professional Societies.
   Israeli Mathematical Union
   American Mathematical Society
   Moscow Mathematical Society

Theses advised (all at the Weizmann Institute)

1994 D. Novikov, C^∞-smooth polynomial normal form for flows of vector fields in codimension 1 (M.Sc.)

1995 M. Roitman, Critical points of the period function for the Newtonian system with a polynomial potential (M.Sc.)

1996 A. Grigoriev, Multijets and stratifiability of loci defined by mixed systems of equations with repetitions (M.Sc.)

1998 D. Novikov, Oscillation of functions defined by systems of ordinary differential equations (Ph. D.)

2001 A. Grigoriev, Singular perturbations and zeros of Abelian integrals (Ph. D.)

2011 G. Binyamini, Q-functions and the Infinitesimal Hilbert 16th Problem (Ph. D.)

2015 S. Tanny, On local Weyl equivalence of higher order Fuchsian equations (M.Sc.)

2016 L. Mezuman, Factorization of non-Fuchsian differential operators (M. Sc.)

Languages

   English, French, Hebrew (fluent), Russian (mother tongue), Spanish (basic).