Date of Revision April 2026

A. BIOGRAPHICAL INFORMATION

1. PERSONAL

– Askold Khovanskii – Home address
605-22 Walmer Road
Toronto, ON,
Canada M5R 2W5
(416)926-8572

– University address
40 St. George Street
Toronto, ON,
Canada M5S 2E4
(416)978-4868

2. DEGREES

– Russian Doctoral degree – 1988 Steklov Mathematical Institute, Moscow
– Newton Polyhedra and Fewnomials
– Ph.D. – 1973 Steklov Mathematical Institute, Moscow
– Representability of Functions in Quadratures. Supervisor V.I. Arnold
– M.S. – 1970 – Moscow State University, Moscow
– Superpositions of Holomorphic Functions with Radicals. Supervisor V.I. Arnold

3. EMPLOYMENT

Since 1996	July	– Full Professor at the University of Toronto, Canada
Since 1991		– Professor of the Moscow Independent University
1995,	January - June	– Visiting Professor, University of Toronto, Canada
1994,	January - June	– Visiting Professor, University of Toronto, Canada
1993,	January - June	– Visiting Professor, University of Minnesota, USA
1992,	July	– Visiting Professor, University Paris-7, France
1992,	March	– Visiting Professor, University of Maryland, USA
1992,	February	– Visiting Professor, University of Bern, Switzerland
1992,	January	– Visiting Professor, Mittag-Leffler Institute, Sweden
1991,	April	– Visiting Professor, University Paris-7, France
1991,	May	– Visiting Professor, University of Dijon, France
1991,	June	– Visiting Professor, Ecole Polytechnic, France
1990,	April	– Visiting Professor (Distinguished Ordway visitor), University of Minnesota, Twin Cities, USA
1990,	March	– Scholar, Harvard University, USA
1981,	spring	– Visiting Professor, IHES, Bures-sur-Yvette, France
1976–2014		– Institute for System Studies of the Academy of Sciences of Russia Main scientific staff member, member of Scientific Committee
1973–1976		– Institute of Applied Mathematics of the Academy of Sciences of the USSR, Junior scientific staff member

4. HONOURS

2025	Distinguished Lectures: series of Chern Lectures as a Shiing-Shen Chern Visiting Professor at Berkeley. The 2024-2025 Chern Lecture: "Topological Galois theory, algebraic geometry and convex geometry". University of California, Berkeley.
2020	Fellow of Royal Canadian Society
2017	International Conference "Galois Meets Newton: Algebraic and Geometric aspects of Singularity Theory" celebrating the 70th birthday of Prof. Askold Khovanskii, Weizmann Institute of Science, Israel
2014	Jefferey–Williams Prize for outstanding contributions to mathematical research in Canada
2012	International Conference dedicated to the 65-th anniversary of Askold G. Khovanskii "Algebra and Geometry", Higher School of Economics, Independent University of Moscow, Moscow, Russia
2012	A meeting of Bourbaki's seminar (France) was devoted to the theoty of Okounkov bodies developed by Kaveh-Khovanskii and Lazarsfeld-Mustata.
2007	Two issues of the Moscow Mathematical Journal (V. 7, NN 2–3) were dedicated to Askold Georgievich Khovanskii on the occasion of his 60th birthday
1990	Ordway Distinguished Lecture & Visitor (well-known mathematicians with a record of major accomplishments), University of Minnesota, Twin Cities, USA
1984	A meeting of Bourbaki's seminar (France) was devoted to Khovanskii's theory of fewnomials
1983	International Congress of Mathematicians in Warszawa. "Fewnomials and Pfaff manifolds". Invited 45-Minute Speaker in Section
1978	A short talk at the International Congress of Mathematicians Helsinki, Finland

5. PROFESSIONAL AFFILIATION AND ACTIVITIES

- Editor in Chief of the Arnold Mathematical Journal, the Institute of Mathematical Science at Stony Brook, USA, and by Springer Verlag, Germany 2015-2023.
- Member of Editorial Board of the Arnold Mathematical Journal, the Institute of Mathematical Science at Stony Brook, USA, and by Springer Verlag, Germany since 2023.
- Fellow of Royal Canadian Society since 2020.
- Chair of the Scientific Committee of International conference "Contemporary mathematics" marking the 80th birthday of Vladimir Arnold, National Research University Higher School of Economics, Moscow, Russia, 2017.
- Member of Canadian Mathematical Society.
- Member of Moscow Mathematical Society (1994–1998 and 2010–2016 member of Boarding Committee).

– Member of American Mathematical Society.

– Series Editor of "Moscow Lectures", Springer Berlin Heidelberg.

– Member of Editorial Board of the Russian Mathematical Surveys (2011-2022).

– Member Dissertation Council (mathematics) of the National Research University Higher School of Economics since 2018.

– Member of Scientific Committee of the Independent Moscow University.

– Member of Boarding Committee of the Journal "Functional Analysis and Other Mathematics" till January 1, 2013.

– Member of Editorial Board of the Moscow Mathematical Journal.

– Member of the Board of Experts Foundation for the Advancement of Theoretical Physics and Mathematics "BASIS". 2018–2025.

– Jury member of the contest "Young Russian Mathematics", 2015–2025.

– Member of the Scientific Committee and Local Organization Committee of Conference Legacy of Vladimir Arnold, Fields Institute, Toronto, Canada. 2013–2014.

– Jury member of the Simons contest, 2011.

– Member of the Program Committee of the Conference "Polynomial Computer Algebra", Euler International Mathematical Institute, St. Petersburg, Russia. 2011–2026.

– Jury member of the Dinastia contest. 2010–2014.

– Consultant of Committee on Translations from Russian and Other Slavic Languages, AMS. 2008–2009.

– Chair of "Math in Moscow Scholarship Selection Committee", AMS. 2007–2008.

– Member "Math in Moscow Scholarship Selection Committee", AMS. 2006–2007, 2008–2009.

– Jury member of the Pierre Deligne and Dinastia contest. 2006–2009.

– Jury member of the Pierre Deligne contest. 2005.

– Member of Editorial Board of the PHASIS Publishing House, 1995–2003.

– Member of Scientific Programme Committee of the International Scientific Conference "New Geometry and Nature", Kazan, Russia. 2003.

– Member of the Program Committee of the Conference Conference in Honor of Vladimir Arnol'd at the Fields Institute. 1997.

– Member of Boarding Committee of the "Functional Analyzes Its Applications". 1994–2005.

– Member of Boarding Committee of the "The Selecta Mathematica Sovietica". 1991–1994.

B. ACADEMIC HISTORY

6. i. RESEARCH ENDEAVOURS

I started the topological Galois theory in my PhD. My theory gives the strongest

results about unsolvability of algebraic and differential equations in finite terms and provides the topological reasons for such unsolvability.

I am one of the creators of the Newton polyhedra theory. I discovered connections between the geometry of Newton polyhedra and the theory of toric varieties, results that are now used in both algebraic geometry and combinatorics. I computed many discrete invariants of singularities and of complete intersections using Newton diagrams and Newton polyhedra. This experience in a polyhedral geometry allowed me to prove (jointly with M. Prokhorov) a longstanding conjecture about absence of a group generated by reflections with a fundamental domain of finite volume in a multidimensional hyperbolic space. Along the same lines is the well known combinatorial analogue of the Riemann-Roch theorem discovered by Pukhlikov and me. It provided the first multidimensional generalization of the Euler-MacLaurin formula and initiated a broad and very fruitful activity in the geometric community.

I also created so called, fewnomial theory. It develops a category of transcendental varieties reminiscent of algebraic geometry. Besides the real algebraic varieties, this category contains, for example, graphs of logarithmic and exponential functions. Among applications of this theory, there are my multidimensional version of the classical rule due to Descartes and the solution by Varchenko and me of the Hilbert-Arnold problem about a uniform bound on the number of zeros of abelian integrals. Also Wilke's solution of the longstanding Tarsky problem heavily uses my fewnomials theory. Another area to a large extent motivated by my fewnomials is the recent theory of O-minimal sets. In 1984 I gave an invited talk about this theory at the International Congress of Mathematicians in Warsaw.

In the last years together with others I developed the theory of Newton-Okounkov bodies, which provides a new powerful connection between algebra and geometry. For example, applying it in one direction one can derive a general theorem about systems of algebraic equations from a simple geometric inequality known even to Ancient Greeks. Applying it again in the opposite direction one can derive from this theorem the famous very hard to prove Alexandrov-Fenchel geometric inequality.

C. SCHOLARLY AND PROFESSIONAL WORK

11. Invited Lecture

i. *General meetings*

* Distinguished Lectures: series of Chern Lectures as a Shiing-Shen Chern Visiting Professor at Berkeley. The 2024-2025 Chern Lecture (3 lectures), University of California, Berkeley, USA.
* 2019 Canadian Mathematical Society Winter Meeting, Convexity in Algebraic Geometry and Symplectic Geometry Session. Toronto. 2019.
* Sessions of Moscow Mathematical Society. 2017.
* 2016 Canadian Mathematical Society Winter Meeting, Combinatorial Algebraic Geometry Scientific Session, Niagara Falls. 2016.
* 2014 Canadian Mathematical Society Winter Meeting, Jeffery-Williams Prize and Lecture, Hamilton. 2014.

* 6th European Congress of Mathematics, Mini-symposium, Krakov, Poland. 2012.
* Sessions of Moscow Mathematical Society. 2011.
* Joint meeting of the St.Petersburg Mathematical Society & the Section of the House of Scientists. St.Petersburg, Russia. 2010.
* Sessions of Moscow Mathematical Society. 2008.
* Sessions of Moscow Mathematical Society. 2007.
* Incorporating 57th British Mathematical Colloquium & 47th British Applied Mathematics Colloquium, Liverpool, UK. 2005.
* Sessions of Moscow Mathematical Society. 2004.
* Conference of Canadian Mathematical Society, Ottawa. 2002.
* Sessions of Moscow Mathematical Society. 2002
* Conference of Canadian Mathematical Society, Kingston. 1998.
* Sessions of Moscow Mathematical Society. 1997.
* Sessions of Moscow Mathematical Society. 1996.
* Conference of Canadian Mathematical Society, Toronto. 1995.
* Sessions of Moscow Mathematical Society. 1995.
* Sessions of Moscow Mathematical Society.1994.
* Congress of Singularities, France. 1991.
* Sessions of Moscow Mathematical Society and Petrovsky Seminar. 1990.
* Sessions of Moscow Mathematical Society.1990
* Sessions of Moscow Mathematical Society and Petrovsky Seminar. 1986.
* Sessions of Leningrad Mathematical Society.1986.
* Sessions of Moscow Mathematical Society. 1984
* International Congress of Mathematicians in Warsaw, Poland. 1983.
* Sessions of Moscow Mathematical Society. 1982.
* Sessions of Moscow Mathematical Society and Petrovsky Seminar. 1981.
* Sessions of Leningrad Mathematical Society. 1980.
* Sessions of Moscow Mathematical Society and Petrovsky Seminar. 1979.
* Sessions of Moscow Mathematical Society. 1979.
* International Congress of Mathematicians in Helsinki, Finland. 1978.
* Sessions of Moscow Mathematical Society and Petrovsky Seminar. 1978.
* Sessions of Moscow Mathematical Society. 1975.

ii. *Research Lecture*

* International Conference "Geometry and combinatorics of integrable systems" dedicated to the 70th birthday of Sergei Lando and the 60th birthday of Maxim Kazarian Russian-Armenian University, Yerevan, Armenia. October 24, 2025. Speaker. (online).
* International Conference "Modern aspects of singularity theory", dedicated to the 75th birthday of Sabir M. Gusein-Zade June, MCCME, Mosc0w, 19, 2025, Speaker. (online).
* Workshop on Computational and Applied Enumerative Geometry, Fields Institute, Toronto, Canada, June 6, 2024. Speaker.

* International Conference on Real and Complex Dynamical Systems. Tsaghkadzor, Armenia, November 24, 2023. Speaker. (online)
* Pure Maths Seminar, University of Queensland, Brisbane, Australia, August 1, 2023.
* Colloquium, School of Mathematics and Statistics, University of Sydney. Sidney, Australia. August 9, 2023.
* Pure Maths Seminar, University of Queensland, Brisbane, Australia, August 21, 2023.
* Canadian Undergraduate Mathematics Conference 2023, Fields Institute,Toronto, June 19-23. Keynote lectures, June 22.
* Graduate students' seminar, Department of Mathematics, U of T, March 29, 2023.
* Department Colloquium, Penn State University, USA, February 23, 2023.
* Undergraduate Students' Colloquium, Penn State University, USA, February 23, 2023.
* Dedicated to V. I. Arnold's 85-th anniversary. International Conference on Differential Equations and Dynamical Systems. Russia, Suzdal, July 2, 2022. Speaker. (online)
* Online International Polyhedral Products Seminar, Princeton University, Princeton, USA. March 2022. Speaker.
* Online Seminar on Polytopes and Polynomials, Higher School of Economics, Moscow, Russia. February 2022. Speaker. Speaker.
* Online AUT winter School. Amirkabir University of Technology, Tehran, Iran. 2022. Speaker.
* Online International School on Torus Topology and Combinatoric. Sirius Mathematics Center. Sochi, Russia. November 2021. Speaker.
* Online International Conference on Multidimensional Residues and Tropical Geometry. Sirius Mathematics Center. Sochi, Russia. June 2021. Speaker.
* The annual International conference on Polynomial Computer Algebra, Euler International Mathematical Institute, St. Peterburg, Russia. 2021. Speaker.
* ZOOM-Seminar in Geometry and Topology, Faculty of Mathematics and Computer Science, Weizmann Institute of Science, Israel. February 2021.
* Online International Conference on Analytic Theory of Differential and Difference Equations, dedicated to the memory of Andrey Bolibrukh, Steklov Mathematical Institute of Russian Academy of Sciences, Moscow, Russia. 2021. Speaker.
* Online International conference on Topology and geometry of group actions, Higher School of Economics, Moscow, Russia. 2020. Key Speaker.
* ZOOM-Seminar in Geometry and Topology, Faculty of Mathematics and Computer Science, Weizmann Institute of Science, Israel. August 2020.
* Workshop on Torus actions in topology, Fields Institute, Toronto, Canada. May 2020. Speaker.
* Topology Seminar, Columbian College of Art & Sciences, George Washington University, Washington, USA. 2020.

* International Conference on Representation theory and integrable systems on the occasion of the 60th birthday of Vitaly Tarasov (IUPUI, USA) and the 70th birthday of Alexander Varchenko (UNC at Chapel Hill, USA), ETH, Zurich, Switzerland. 2019. Plenary Speaker.
* Colloquium. International School for Advanced Studies (SISSA), Trieste, Italy. June 12, 2019.
* Workshop "Braids, Resolvent Degree and Hilbert's 13th Problem". Institute for Pure and Applied Mathematics (IPAM), UCLA, Los Angeles, USA. 2019.
* Fall Central Sectional AMS Meeting, University of Michigan, Ann Arbor, USA. 2018.
* Colloquium, McMaster University, Hamilton, Ontario, Canada. October 5, 2018.
* International Conference "Patchworking of geometry and topology" on the occasion of the 70th anniversary of Oleg Viro, Belalp, Switzerland. 2018.
* Workshop of Grigory Mikhalkin's Seminar. University of Geneva, Geneva, Switzerland. 2018.
* Conference "Achievements of mathematics of the last decade", National Research University Higher School of Economics, Moscow, Russia. 2018.
* International Conference "Algebraic Topology, Combinatorics, and Mathematical Physics" on occasion of Victor Buchstaber's 75th Birthday. Steklov Mathematical Institute of Russian Academy of Sciences, Skolkovo Institute of Science and Technology Moscow, Russia. 2018.
* The 14th Serbian Mathematical Congress. Kragujevac, Serbia. 2018.
* International conference "Contemporary mathematics" marking the 80th birthday of Vladimir Arnold, National Research University Higher School of Economics, Moscow, Russia. 2017.
* Algebraic Geometry Seminar, Laboratory of Algebraic Geometry and its Applications, National Research University Higher School of Economics, Moscow, Russia. 2017.
* General seminar "Globus", the Independent Moscow University, Moscow, Russia. 2017.
* Lie groups and invariant theory Seminar, Moscow State University, Moscow, Russia. 2017.
* Department Colloquium. University of Toronto. 2017.
* International Conference on Perspectives in Real Geometry, Marseille - Luminy, France. 2017. Plenary Speaker.
* Séminaire de géométrie, groupes et dynamiques - Unité de mathématiques pures et appliquées - UMPA/ENSL - Lyon - Sud-Est, France. 2017.
* International Conference Galois Meets Newton: Algebraic and Geometric aspects of Singularity Theory Celebrating the 70th birthday of Prof. Askold Khovanskii, Weizmann Institute of Science, Rekhovot, Israel. 2017. Keynote Speaker.
* Knots and Representation Theory Seminar, Moscow State University, Moscow, Russia. 2017.
* Workshop: Algebraic Groups. Oberwolfach. Germany. 2017.

* International Conference on Nano-phenomena and Functionality of modern Carbon-Based Tribo-Coatings, Sevilla, Spain, 2017. Plenary Speaker.
* Colloquium, Fields Institute, Toronto, Canada. 2016.
* Seminar on analytic theory of differential equations, Steklov Mathematical Institute, Moscow, Russia. 2016.
* Seminar in Geometry and Topology, Department of Mathematics, Weizmann Institute of Science, Rekhovot, Israel. 2016.
* Seminar in Real and Complex Geometry, Tel Aviv University, Tel Aviv, Israel. 2016.
* Workshop at the Graduate Center: Kolchin Seminar in Differential Algebra (a cross-listing from the Commutative Algebra / Algebraic Geometry Seminar), Graduate Center, City University of New York. New York, USA. 2016. Invited Speaker.
* New York Number Theory Seminar, Graduate Center, City University of New York. New York, USA. 2016.
* Department Colloquium. University of Toronto. 2015.
* International Conference on Toric Topology, Number Theory and Applications. Khabarovsk, Russia. Plenary Speaker. 2015.
* International Conference on Singular Landscape. In honor of Bernard Teissier's 70th birthday. Centre Paul-Langevin AUSSOIS, France. Invited Speaker. 2015.
* Canadian Mathematical Society Winter Meeting, Session on Toric and Combinatorial Algebraic Geometry, Hamilton. 2014.
* International conference on Geometry, Topology and Integrability, Skolkovo Institute of Science and Technology, Moscow, Russia. Plenary Speaker. 2014.
* International Workshop on Convex Bodies and Representation Theory, Banff International Research Station. Banff, AB, Canada. 2014.
* Workshop on Optimization, Moment Problems. Part of International program "Inverse Moment Problems: the Crossroads of Analysis, Algebra, Discrete Geometry and Combinatorics and Geometry II". Institute for Mathematical Sciences, Singapore. Plenary Speaker. 2013.
* Colloquium at the University of Pittsburgh, Pittsburgh, USA. 2013.
* International Open Chinese-Russian conference on Torus Actions: Topology, Geometry and Number Theory, Pacific National University, Khabarovsk, Russia. Plenary Speaker. 2013.
* International conference on Algebraic Topology and Abelian Functions, Conference in honour of Victor Buchstaber on the occasion of his 70th birthday, Steklov Mathematical Institute, Moscow, Russia. Plenary Speaker. 2013.
* Combinatorics of Vassiliev invariants, Arnold's Lecture. State University Higher School of Economics, Moscow, Russia. 2013
* International conference on Analysis and Singularities dedicated to the 75th anniversary of Vladimir Igorevich Arnold, Steklov Mathematical Institute, Moscow, Russia. Plenary Speaker. 2012.
* Seminar, University of Michigan, Ann Arbor, USA. 2011.
* International Conference on Resolution of Singularities and Related Topic In Honour of the 80th Birthday of Heisuke Hironaka Tordesillas, Spain. 2011.

* International Conference on Toric Topology and Automorphic Functions. Khabarovsk, Russia. Plenary Speaker. 2011.
* Mini-Workshop: New Developments in Newton-Okounov Bodies. Oberwolfach. Germany. 2011.
* International Conference on Control and Optimization of Nonholonomic System. Pereslavl-Zalessky, Vladimir State University, Russia. Invited Speaker. 2011.
* International Conference on Metric Geometry of Surfaces and Polyhedra. Moscow State University, Moscow, Russia. 2011.
* International Conference on Geometry, Topology, Algebra and Number Theory, Applications, Steklov Mathematical Institute, Moscow, Russia. Invited Speaker. 2010.
* International Conference on Differential Equations and Dynamical Systems. Suzdal, Vladimir region, Russia. Plenary Speaker. 2010.
* Research Conference on Algebraic Methods in Dynamical Systems, Banach Center, Bedlewo, Poland. Invited Speaker. 2010.
* Special Algebraic Geometry Seminar, University of British Columbia, Vancouver, Canada. 2010.
* Colloquium, McMaster University, Hamilton, Ontario, Canada. 2010.
* Colloquium, University of Toronto, Canada. 2010.
* Workshop on Complexity of Numerical Computation. Thematic Program on the Foundations of Computational Mathematics. Fields Institute, Toronto. 2009.
* Conference "Algebra and Topology in Interaction" in Honor of Professor Dmitry B.Fuchs on the occasion of his 70th Anniversary. UC Davis - MSRI, Davis, USA. 2009.
* Teissier's Seminar on Singularities, Institut Mathématique de Jussieu, Paris, France. 2009.
* Seminar of Harmonic Analysis, Laboratoire de Mathématiques, Université Paris-Sud 11, Orsay, France. 2009.
* Novikov's Seminar on Geometry, Topology and Mathematical Physics, Moscow State University, Moscow, Russia. 2009.
* Mini-workshop on New Perspectives in Valuation Theory. Thematic Program on O-minimal Structures and Real Analytic Geometry.Fields Institute, Toronto. 2009.
* Seminar "Riemann surfaces, Lie algebras and math. physics", Independent University of Moscow, Moscow, Russia. 2008.
* Third International Workshop on Differential Algebra and Related Topics, Rutgers University at Newark, Newark New Jersey, USA. 2008.
* Colloquium, The University of Western Ontario, London, Ontario. 2008
* General seminar "Globus", the Independent Moscow University, Moscow, Russia. 2008.
* Algebra and Geometry Seminar, University of Toronto. 2008.
* International Conference on New Horizons in Toric Topology, University of Manchester, Manchester, UK. Plenary speaker. 2008.
* International Conference on Differential Equations and Topology dedicated to

the Centennial Anniversary of L.S. Pontryagin, the Steklov Mathematical Institute and Moscow State University, Moscow. 2008

* Conference on Perspectives in Analysis, Geometry, and Topology. Stockholm University. Sweden. 2008.
* Workshop on Effective real analytic geometry, ICMS, Edinburgh, UK. 2008.
* Workshop Enumeration and Bounds in Real Algebraic Geometry. Centre Interfacultaire Bernoulli (Ecole Polytechnique Federale de Lausanne), Lausanne, Switzerland. 2008.
* Undergraduate Student Seminar. University of Toronto. 2008.
* Seminar Algebra and Geometry. University of Toronto. 2007.
* International conference "Analysis and Singularities", dedicated to the 70th anniversary of Vladimir Igorevich Arnold. Steklov Mathematical Institute, Moscow, Russia. Plenary speaker. 2007.
* International Conference on the occasion of the 150th birthday of Aleksander Mikhailovich Lyapunov. Kharkiv, Ukraine. Plenary speaker (2 talks). 2007.
* Seminar Riemann Surfaces, Lie Algebras and Vath. physics. Independent Moscow University, Moscow, Russia. 2007.
* Parshin's Seminar, Steklov Institute, Moscow, Russia. 2007.
* North American Workshop on Tropical Geometry. Banff International Research Station, Banff, Canada. 2007.
* Wilfrid Laurier University, Waterloo. Institute for System Studies of the Academy of Sciences of Russia, Moscow, Russia. 2007.
* Dynamical systems seminar, University of Toronto. 2006.
* Department of Computer and Mathematical Sciences, UTSC, Toronto. 2006.
* Joint RFBR–JSPS Symposium, Moscow Session, "Geometry and Analysis on Complex Algebraic Varieties", Moscow, Russia. 2006.
* International Conference on Differential Equations and Dynamical Systems, Suzdal, Russia. 2006.
* International Conference on Toric Topology, Osaka City University, Japan. 2006.
* Geometry and Model Theory Seminar, University of Toronto, Canada. 2005.
* Seminar "Characteristic classes and the theory of intersections", Independent Moscow University, Moscow, Russia.2005.
* International Conference on Foundations of Computational Mathematics, Workshop on Computational Algebraic Geometry, Santander, Spain. 2005.
* Mathematical Institute University of Oxford, Oxford, UK. 2005.
* COW seminar (Cambridge–Oxford–Warwick Algebraic Geometry seminar) Cambridge, UK. 2005.
* Pure Seminar, the Department of Mathematics, University College, London, UK. 2005.
* Seminars at the Department of Mathematics, Cardiff University, Cardiff, UK. 2005.
* Hull Institute for Mathematical Sciences and Applications (HIMSA) University of Hull, Hull, UK. 2005.
* International Conference "Representation theory, Dynamical systems, and asymp-

totic combinatorics, St. Petersburg, Russia. 2004.

* CRM-ISM de mathematiques Colloquium, Montreal. 2005.
* International Conference "The Coxeter Legacy: Reflections and Projections" The Fields Institute, Toronto, Canada. 2004.
* Colloquium, University of Toronto, Canada. 2004.
* International Scientific Conference "New Geometry and Nature", Kazan, Russia. 2003.
* International Conference "Kolmogorov and Cotemporary Mathematics", Moscow State University, Moscow, Russia. Plenary Speaker. 2003.
* Workshop Commutative Algebra and Geometry, BIRS, Banff Center, Canada.2003.
* Anosov-Bolibrukh's Seminar, Mathematical Institute, Moscow, Russia. 2003. Institute for System Studies, Moscow, Russia.2003.
* Mathematical Institute, St.Peterburg, Russia.2002.
* Vinberg's seminar, Moscow State University, Russia. 2002.
* Seminar on Grothendieck residues, Saitama University, Japan. 2002.
* Mathematical Institute, Tohoku University, Sendai, Japan. 2002.
* Algebraic Geometry Seminar, Saitama University, Japan.2002.
* International Conference "Differential Equations and Dynamical Systems", Suzdal, Russia.2002.
* Joint colloquium for the 4 mathematics departments in the city, Montreal, Canada. 2002.
* "Malyi Mehmat", Moscow State University, Russia. 2001.
* Seminar on Algebraic Geometry, Steklov Institute, Moscow, Russia/2001.
* International Conference "Fundamental mathematics today" Dedicated the 10th Anniversary of the Independent University of Moscow, Russia. 2001.Colloquium, Cornell University, Ithaca, USA. 2001.
* International Conference Monodromy in Geometry and Differential Equations Steklov Mathematical Institute, Moscow, Russia.2001.
* Kinki University, Higashi-Osaka, Japan.2001.
* Algebraic geometry seminar, Saitama University, Urawa, Japan. 2001.
* Sergey Novikov's seminar, University of Maryland, USA. 2001.
* Workshop on "Combinatorial Convexity and Algebraic Geometry", Mathematisches Forschungsinstitut Oberwolfach, Germany. 2001.
* General seminar "Globus", the Independent Moscow University, Moscow, Russia. 2000–2001.
* International Conference on Foundation of Computational Mathematics Celebrating Smale's 70th birthday, City University of Hong Kong. 2000.
* Seminario Iberoamericano de Singularidades en Tordesillas, Spain. 2000.
* Universidad de Complutense, Madrid, Spain. 2000.
* Colloquium, Instituto de Matematicas - UNAM, Mexico City, Mexico Instituto de Matematicas - UNAM, UNIDAD Cuernavaca, Mexico. 2000.
* Colloquium, L'IRMA, University Louis Pasteur, Strasbourg, France. 1999.
* City University of Hong Kong, Hong Kong. 1999.

* Colloquium, University of Toronto, Canada. 1999.
* International Conference "Solitons, Geometry and Topology: On the Crossroads", Steklov Institute, Moscow. 1998.
* Weizmann Institute of Science, Rekhovot, Israel Technion, Haifa, Israel. 1998.
* Conference in Honor of Vladimir Arnol'd, Fields Institute, Toronto. 1997.
* Workshop on Geometry and Complexity, Fields Institute, Toronto. 1997.
* Workshop on Model Theory of Analytic Functions, Fields Institute, Toronto. 1997.
* Seminar on Control Theory, Department of Computer Sciences, MSU, Moscow, Russia. 1996.
* Seminar on Numbers Theory, Steklov Institute, Moscow, Russia. 1996.
* Institute of Applied Mathematics, Moscow, Russia. 1996.
* Nelson lecture, McMaster University, Hamilton, Canada. 1996.
* Seminar on Algebraic Geometry, Steklov Institute, Moscow, Russia. 1995.
* Michael Gromov's seminar, IHES, France. 1995.
* University of Toronto, Canada. 1995.
* University of Bordeaux, France. 1995.
* University Paris 11, France. 1995.
* Ecole Normale Superieure, France. 1995.
* Institute of Applied Mathematics, Moscow, Russia. 1995.
* Seminar on Combinatorial analysis, Steklov Institute, Moscow, Russia. 1995.
* University of Pisa, Italy. 1994.
* University of Montreal, Canada. 1994.
* University of Toronto, Canada. 1993.
* MIT, USA. 1992.
* Scola Normala Superiora, Pisa, Italy. 1992.
* Uppsala University, Sweden. 1992.
* University of North Carolina, USA. 1992.
* Stanford University, USA. 1992.
* Rice University, USA. 1992.
* Cornell University, USA. 1992.
* Twent University, The Netherlands. 1991.
* Utrecht University, The Netherlands. 1991.
* Michael Gromov's seminar, IHES, France. 1991.
* Siberian School on the Algebra, Tomsk, Russia. 1990.
* MIT, USA. 1990.
* Rice University, USA. 1990.
* Harvard University, USA. 1990.
* Siberian School on the Algebra and Analysis Baikal, Russia. 1989.
* MIT, USA. 1988.
* Courant Institute, NY University, USA. 1988.
* Winter Mathematical School, Voronezh, Russia. 1987, 1981.

* Rene Tom's seminar, IHES, France. 1981.
* All-Union Conference, Baku, Azerbaijan. 1979.
* Topological Conference, Tbilisi, Georgia. 1972.
* Seminar on Algebraic Geometry, Steklov Institute, Moscow, Russia. 1872–1988.
* Arnold's seminar on singularity theory, Moscow, Russia. 1967–2010.

D **LIST OF COURSES**

13. i. Undergraduate courses taught

2025-2026	MAT 401S	Polynomial Equations and Fields
2025-2026	MAT 403S	Classical Geometries II
2025-2026	MAT 402F	Classical Geometries
2024-2025	MAT 402F	Classical Geometries
2023-2024	MAT 403S	Classical Geometries II
2023-2024	MAT 402F	Classical Geometries
Reading course	S	Algebraic Geometry, Convex Geometry and Topology related to Berstein–Koushnirenko Theorem
2022-2023	MAT 482S	Advanced Classical Geometries
2022-2023	MAT 402F	Classical Geometries
2021-2022	MAT 482S	Advanced Classical Geometries
2021-2022	MAT 402F	Classical Geometries
2020-2021	MAT 402F	Classical Geometries
2019-2020	MAT 482S	Advanced Classical Geometries
2019-2020	MAT 402F	Classical Geometries
2018-2019	MAT 482S	Advanced Classical Geometries
2018-2019	MAT 292F	Calculus III
2018-2019	MAT 402F	Classical Geometries
2017-2018	MAT 402S	Classical Geometries
2016-2017	MAT 402S	Classical Geometries
2016-2017	MAT 334F	Complex Variables
2015-2016	MAT 402S	Classical Geometries
2015-2016	MAT 425F	Differential Topology
2014-2015	MAT 402S	Classical Geometries
2013-2014	MAT 402S	Classical Geometries
2013-2014	MAT 401F	Polynomial Equations and Fields
2012-2013	MAT 402S	Classical Geometries
2012-2013	MAT 401F	Polynomial Equations and Fields
2011-2012	MAT 402S	Classical Geometries
2011-2012	MAT 401F	Polynomial Equations and Fields
2010-2011	MAT 402S	Classical Geometries
2009-2010	MAT 402S	Classical Geometries
2009-2010	MAT 401S	Polynomial Equations and Fields
2008-2009	MAT 402S	Classical Geometries
2007-2008	MAT 402S	Classical Geometries
2005-2006	MAT 402S	Classical Geometries

2004-2005	MAT 267S	Advanced Ordinary Differential Equations
2004-2005	MAT 365S	Classical Plane Geometries and their Transformations
2003-2004	MAT 267S	Advanced Ordinary Differential Equations
2003-2004	MAT 365S	Classical Plane Geometries and their Transformations
2001-2002	MAT 244F	Ordinary Differential Equations
2001-2002	MAT 365S	Classical Plane Geometries and their Transformations
2000-2001	MAT 365S	Classical Plane Geometries and their Transformations
2000-2001	MAT 498Y	Readings in Mathematics: Group Theory & Non-Euclidean Geometry
1999-2000	MAT 363F	Differential Geometry I
1999-2000	MAT 398Y	Readings in Mathematics: Topics in Analysis, Algebra, and Geometry
1999-2000	MAT 244S	Ordinary Differential Equation
1999-2000	MAT 365S	Classical Plane Geometries and their Transformations
1998-1999	MAT 363F	Differential Geometry I
1998-1999	MAT 267S	Advanced Ordinary Differential Equation
1998-1999	MAT 325S	Classical Plane Geometries and their Transformations
1997-1998	MAT 467F	Seminar in Math
1997-1998	MAT 467S	Seminar in Math
1995-1996	MAT 244S	Differential equations

ii. Graduate courses taught

2024-2025	MAT1191H F	Topics in Algebraic Geometry: Toric Geometry and Newton Polyhedra
2023-2024	MAT1103H S	Topics in Algebra I: Algebraic geometry and smooth topology
2022-2023	Reading course S	Algebraic Geometry, Convex Geometry and Topology related to Berstein–Koushnirenko Theorem
2022-2023	MAT1191H F	Topics in Algebraic Geometry: Algebraic Geometry and Convex Geometry
2021-2022	MAT1104H F	Topics in Algebra II: Topological Galois Theory. Solvability and nonsolvability of equation in finite terms (U of T & Fields Academy)
2019-2020	MAT1191H S	Topics in Algebraic Geometry: Algebraic Geometry and Convex Geometry (Fields Institute)
2017-2018	MAT1191S	Topics in Algebraic Geometry: Toric Varieties and Newton Polyhedra
2016-2017	MAT1191S	Topics in Algebraic Geometry: Newton Okounkov Bodies
2015-2016	MAT 1104S	Topics in Algebra II: A Topological Variant of Galois Theory
2015-2016	MAT 1340F/425F	Differential Topology
2014-2015	MAT 1104S	Introduction to Algebraic Geometry, Algebraic Curves and Plane Geometry
2013-2014	MAT 1191S	Topics in Algebraic Geometry: Convex Geometry and Algebraic Geometry. Toric Varieties
2012-2013	MAT 1194S	Algebraic Curves and Plane Geometry
2011-2012	MAT 1194S	Algebraic Curves: Galois Theory and Riemann

		Surfaces
2009-2010	MAT 1340F/425HF	Introduction to Smooth Topology and Mapping Degree Theory
2008-2009	MAT 1103F	Introduction to Algebraic Geometry, Algebraic Curves and Plane Geometry
2008-2009	MAT 1190S	Toric Varieties and Newton Polyhedra
2007-2008	MAT 1340F/425F	Differential Topology I: Smooth Topology and Morse Theory
2007-2008	MAT1341S	Differential Topology II: Algebraic Topology from a Differential Viewpoint
2006-2007	MAT 1103F	Galois Theory and Riemann Surfaces
2005-2006	MAT 1194F/449F	Introduction to Algebraic Geometry, Algebraic Curves and Plane Geometry
2005-2006	MAT 1190S	Introduction to Algebraic Geometry, Toric Varieties and Newton Polyhedra
2004-2005	MAT 1341F/425F	Differential Topology
2003-2004	MAT 1190F	Real Algebraic Geometry and Fewnomials
2003-2004	MAT 1901F	Readings in Mathematics: Toric Geometry
2001-2002	MAT 1190F	Introduction to Algebraic Geometry, Toric Varieties
2000-2001	MAT 1341F/425F	Differential topology
1999-2000	MAT F	A topological variant of Galois theory
1998-1999	MAT F	Algebraic Geometry of Toric Varieties
1997-1998	MAT 1155F	Introduction to Algebraic Geometry, Toric Varieties
1996-1997	F	Introduction to the Differential Topology (MIU)
1996-1997	MAT 1313S	Fewnomials (at the Fields Institute and U of T)
1995-1996	MAT 1312S	Topics in Geometry

iii. Supervision of undergraduate, graduate students and postdocs (since 1996)

2025-2026	Hsiao, Yun Ping (Andy)	(graduate student) supervision
2023-2026	Nikitin, Ivan	(graduate student) supervision
2024-2026	Taroyan, Gregory	(graduate student) co-supervision
2023	Bogachev, Nikolay	postdoc, supervision
2021-2026	Tronsgard Aaron	(graduate student) supervision
2020-2021	Limonchenko Ivan	postdoc, supervision
2019-2020	Kogan Feodor	(graduate student) co-supervision
2013-2019	Monin Leonid	(Ph.D. completed in 2019) supervision
2012-2015	Gal Binyamini	postdoc, supervision Banting Postdoctoral Fellowships
2009-2011	Matveev Konstantin	(undergraduate student) supervision, Konstantin was the best Canadian contestant in 2010 Putnam Competition, he will receive the Nathan Mendelsohn Prize for this honour
2008-2012	Burda Yuri	(Ph.D. completed in 2012) supervision
2007-2012	Yang Jessie	(Ph.D. completed in 2012) supervision
2006-2007	Chulkov Sergey	postdoc, supervision
2005-2010	Firsova Tatiana	(Ph.D. completed in 2010) supervision
2005-2010	Mazin Mikhail	(Ph.D. completed in 2010) supervision

2005-2009	Ivrii Oleg	(undergraduate student) supervision
2005-2007	Esterov Alexander	postdoc, supervision
2003-2009	Kisunko Veniamin	(Ph.D. completed in 2009) supervision
2003-2005	Chulkov Sergey	(Ph.D. completed at MSU in 2005) co-supervision
2002-2004	Kirichenko Valentina	(Ph.D. completed in 2003) supervision
2001-2004	Timorin Vladlen	(Ph.D. completed in 2003) supervision
2000-2002	Chulkov Sergey	(undergraduate student) supervision
2000-2002	Kirichenko Valentina	(undergraduate student) supervision
2000-2003	Kisunko Veniamin	(undergraduate student) supervision
1997-2002	Soprunova Eugenia	(Ph.D. completed in 2002) supervision
1997-2002	Soprunov Ivan	(Ph.D. completed in 2002) supervision
1997-2002	Kaven Kiumars	(Ph.D. completed in 2002) supervision
1999-2001	Farz-ali Izadi	(Ph.D. completed in 2001) supervision
1999-2001	Novikov Dmitrii	postdoc, co-supervision
1997-1998	Ivrii Alex	(undergraduate student) supervision
1996-2001	Timorin Vladlen	(undergraduate student) supervision
1996-1997	Libine Matvei	(undergraduate student) supervision, Matvei got Frank Knox Memorial Fellowship, and NSERC Postgraduate Scholarship (graduating from U of T at Spring 1997)
1996-1997	Belkin Mikhail	(undergraduate student) supervision

iv. Supervision of Seminars

2023-2024	Algebraic Geometry and Combinatorics Seminar
2018-2019	Seminar on Spherical Varieties
2017-2018	Learning Seminar on Spherical Varieties
2013-2014	Algebra and Geometry Seminar
2012-2013	Algebra and Geometry Seminar
2011-2012	Algebra and Geometry Seminar
2010-2011	Algebra and Geometry Seminar
2009-2010	Algebra and Geometry Seminar
2008-2009	Algebra and Geometry Seminar
2007-2008	Algebra and Geometry Seminar
2006-2007	Algebra and Geometry Seminar
2005-2006	Algebra and Geometry Seminar
2003-2004	Geometry Seminar
2001-2002	Newton Polyhedra Seminar
2000-2001	Toric Varieties, Convex Geometry and Combinatorics Seminar
Fall, 2000	Analytic Geometry and Differential Equations Seminar
Spring, 2001	Algebra and Geometry Seminar

Lectures Series

2019	Research Group: Geometry and Mathematical Physics on Convex bodies in real geometry, SISSA (International School for Advanced Studies), Trieste, Italy.
2017	Department of Mathematics, National Research University

Higher School of Economics, Moscow, Russia.
2014 School 57's Summer Math Camp, Ershovo, Moscow region, Russia.
2013 3-rd Summer School on Geometric Methods in Mathematical Physics, Bogolyubov Laboratory, Moskow State University, Voskresensk, Russia.
2010 Summer school "Modern Mathematics", Dubna, Russia.
2009 Thematic Program on the Foundations of Computational Mathematics, Fields Institute, Toronto, Canada
2009 Université Paris-Sud 11, Orsay, France
2007 Independent Moscow University, Russia
2006 Summer school "Modern Mathematics", Dubna, Russia.
2003 Independent Moscow University, Russia
Summer school "Modern Mathematics", Dubna, Russia.
2002 RIMS, Kyoto University, Japan
2002 Saitama University, Japan
2001 RIMS, Kyoto University, Japan
2001 Independent Moscow University, Russia
2001 Summer school "Modern Mathematics", Dubna, Russia
2000 University of Valladolid, Spain
1999 L'IRMA, University Louis Pasteur, Strasbourg, France
1998 Independent Moscow University, Russia
1997 Fields Institute, Toronto, Canada
1996 Mathematical Sciences Research Institute, Berkeley, CA, USA
1995 Stefan Banach International Center, Warszawa, Poland
University of Toronto, Canada
1994 University of Toronto, Canada
Institute of Fourier, Grenoble, France
Independent Moscow University, Russia
1993 Independent Moscow University, Russia
University of Minnesota, USA
1992 University of Bern, Switzerland
1991-92 Moscow State University, Russia
1990 University of Minnesota
1990-91 Moscow State University, Russia
1988 XIII All-Union School on the Operator Theory in Functional Spaces
1979 Winter Mathematical School, Voronezh, Russia
1984 Moscow State University

E **ADMINISTRATIVE POSITIONS**

14 i. Positions held and service on committees and organisation witin the University

* Member of PhD Supervisory committee (2025-2026, 2024-2925, 2023-2024, 2022-2023, 2019-2020, 2018-2019, 2017-2018, 2015-2016, 2015-2016, 2014-2015)
* Member of the Graduate Committee (2025-2026, 2024-2925, 2023-2024, 2022-2023, 2021-2022, 2019-2020, 2018-2019, 2016-2017, 2015-2016, 2014-2015, 2013-2014, 2012-2013, 2011-2012, 2010-2011, 2005-2006, 2004-2005, 2001-2002, 2000-2001, 1999-2000).

* Member of Post-doc Committee (2021-2022).
* Member of Internal Reading Committee for Shubhangi Saraf's tenure review (2020).
* Member of Department of Mathematics Council (2018-2021).
* Member of the Undergraduate Committee (2020-2021, 2019-2020, 2018-2019, 2017-2018, 2016-2017, 2015-2016, 2014-2015, 2013-2014, 2011-2012).
* Member of Final Oral Examination Committee (the Degree of Doctor of Philosophy) for: Leonid Monin (2018-2019), Jessie Yang, Yuri Burda (2012-2013); Tatiana Firsova, Mikhail Mazin, Leonid Shartser (2010-2011); Pinaki Mondal (2009-2010); Valentina Kiritchenko, Vladlen Timorin (May 14, 2004); Eugenia Soprounova, Ivan Soprounov (2002-2003); Farz-Ali Izadi, Kiumars Kaven (2001-2002).
* Member of the Departmental Ph.D. Oral Exam Committee for: Leonid Monin (2018-2019), Jessie Yang, Yuri Burda (2011-2012); Leonid Shartsers (2010-2011); Mikhail Mazin, Tatiana Firsova (2009-2010); Pinaki Mondal, Andy Hammerlindl, Bradford Hovinen (2008-2009); Valentina Kiritchenko, Vladlen Timorin (2003-2004); Farz-Ali Izadi, Kiumars Kaven, Eugenia Soprounova, Ivan Soprounov (2001-2002).
* Member of Internal NSERC USRA Committee (2018-2019, 2015-2016).
* Member of Coxeter/Post-doc Committee Member (2015-2016).
* Member of PhD Supervisory Committee.
* Member of Appointments Committee Member St. George (Geometry, Number Theory and their applications) 2013-2014.
* Member of Outreach Committee (2012-2013, 2011-2012).
* Member of Secondary School Liaison Committee (2009-2010, 2008-2009, 2007-2008, 2001-2002, 2001-2000).
* Member of Committee for Bradford Hovinen's SGS Final Exam (2008-2009).
* Chair of Committee for Dale Dolan the final Ph.D. oral exam (2008-2009).
* Member of Appointments Committee (St. George) (2007-2008).
* Member of the adjudicating panel for the Ontario Graduate Scholarship (2005-2006).
* Member of PDF/CLTA Committee (2005-2006).
* Planning Committee (2003-2004).
item Member of the Colloquium Committee (2001-2002).
* Served for the Promotion Committee by providing a confidential evaluation (2001-2002).
* Judge of High School Mathematical Battle (2001-2002).
* Dean's representative to the Computer Science Appointments Committee (2000).
* Departmental Council (2000-2001).
* Tenure committee (1999-2000).
* The St.George appointments committee, Algebra, Number Theory and Geometry (Int. search) (1999-2000).
* Member of Promotion Committee (1998-1999).
* I took a part in the tenure hearing for A.Nabutovsky (1997-1998).

* Member of the Hireing Committee (1997-1998).
* Member of the Hiring Committee for join position Mathematical and Computer sciences Departments U of T (1996-1997).
* Main Judge of High School Mathematical Tournament (1996-2013.
* Lecture for High School students (1996-2016).

ii. Positions held and service on committees and organisation outside the University of scholarly and academic significance

* Chair of the Scientific Committee of International conference "Contemporary mathematics" marking the 80th birthday of Vladimir Arnold, National Research University Higher School of Economics, Moscow, Russia, 2017.
* Member of Organizing committee Mini-Workshop on Convex bodies and representation theory, BIRS, Banff, Canada. 2013–2014.
* Member of Organizing committee Mini-Workshop on Okounkov bodies and applications, Oberwolfach, Germany. 2013.
* Member of Organizing committee Mini-Workshop on New Developments in Newton–Okounov Bodies, Oberwolfach, Germany. 2011.
* Member of Organizing committee Workshop on Complexity of Numerical Computation (Thematic Program on the Foundations of Computational Mathematics), Fields Institute, Toronto, Canada. 2009.
* Member of Organizing committee of International Conference "Analysis and Singularities" dedicated to the 70th anniversary of Vladimir Igorevich Arnold, Steklov Mathematical Institute, Moscow, Russia. 2007.
* Chairman of Organizing Committee of International Conference "Hilbert's Sixteenth and Related Problems in Dynamics, Geometry and Analysis (In honor of the 60-th anniversary of Yulij Sergeevich Ilyashenko), Moscow, Russia. 2003.
* Member of Organizing Committee of workshop on "Computational Algebraic Geometry" (Third International Meeting of Foundations of Computational Mathematics in Minneapolis). Minneapolis, USA. 2002.
* Member of Organizing Committee of workshop on Geometry and Complexity at the Fields Institute. Toronto, Canada. 1997.
* Member of Organizing Committee Singularity Theory and Geometry Program at the Fields Institute. Toronto, Canada. 1997.