Yury Ustinovskiy

Curriculum Vitae

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Education

2006-2011 **Moscow State University**, *Master's degree in mathematics cum laude*, Department of Geometry and Topology.
supervisor: Taras Panov

2006-2012 **Independent University of Moscow**, *Master's degree in mathematics cum laude*.
supervisor: Taras Panov

2014-2018 **Princeton University**, *PhD in mathematics*, Department of Mathematics.
supervisor: Gang Tian

Thesis

Master's thesis **Geometrical structures on moment-angle-manifolds**
supervisor: Taras Panov

PhD thesis **Hermitian curvature flow and curvature positivity conditions**
supervisor: Gang Tian

Research interests

Non-Kähler complex geometry, differential geometry, equivariant algebraic topology,

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Publications & preprints

2009 **Doubling operation for polytopes and torus actions**, *Yu. M. Ustinovskii*, Russian Mathematical Surveys, 2009, 64:5, pp. 952 –954.
`arXiv:0909.1050`

2011 **Toral Rank Conjecture for Moment-Angle Complexes**, *Yu. M. Ustinovskii*, Math. Notes, 2011, 90:2, pp. 279–283.
`arXiv:0909.1053`

2012 **Complex-analytic structures on moment-angle-manifolds**, *T. Panov, Y. Ustinovsky*, Moscow Mathematical Journal, 2012, 12:1.
`arXiv:1008.4764`

2012 **On torus actions and Horrocks conjecture**, *Yu. M. Ustinovskii*, Far Eastern mathematical journal, 2012, 12:1, pp. 98–107.
`arXiv:1203.3685`

2014 **Geometry of compact complex manifolds with maximal torus action**, *Y. Ustinovsky*, Tr. Mat. Inst. Steklova, 2014: 286, pp. 219–230.
`arXiv:1308.2818`

2016	**Complex geometry of moment-angle manifolds**, *T. Panov, Y. Ustinovsky, M. Verbitsky*, Mathematische Zeitschrift, 2016, 1-2:284, pp. 309–333. `arXiv:1308.2818`
2016	**Projective toric polynomial generators in the unitary cobordism ring**, *G. Solomadin, Y. Ustinovskiy*, Mat. Sbornik, 207:11, pp. 127–152. `arXiv:1602.02448`
2016	**The Hermitian curvature flow on manifolds with non-negative Griffiths curvature**, *Y. Ustinovskiy*, preprint. `arXiv:1604.04813`
2018	**On face numbers of flag simplicial complexes**, *Y. Ustinovskiy*, Discrete Comput. Geom. `arXiv:1610.03888`
2017	**Hermitian curvature flow on complex homogeneous manifolds**, *Y. Ustinovskiy*, preprint. `arXiv:1706.07023`
2017	**Lie-Algebraic Curvature Conditions preserved by the Hermitian curvature flow**, *Y. Ustinovskiy*, preprint. `arXiv:1710.06035`

Awards, honours & grants

2009	Dobrushin stipend for talented students
2011	Dobrushin stipend for talented students
2012-2013	Dmitri Zimin's "Dynasty" foundation stipend for young scientists
2012	Simons' foundation stipend for students
2013-2014	Dmitri Zimin's "Dynasty" foundation stipend for young scientists

Recent conference talks

08.2016	*Glances@Manifolds II* Kraków, Jagiellonian University
02.2017	*RTG day* Princeton University
05.2017	*AMS Sectional Meeting* New York, Hunter College
06.2017	*Encounter in Topology 'n Algebra* Catania, Scuola Superiore di Catania

Recent seminar talks

09.2014	On complex geometry of some non-Kahler manifolds *Graduate student seminar*, Princeton
04.2015	Cohomology of spaces with torus action and toral rank conjecture *Algebraic topology seminar*, Princeton

12.2015	Toric polynomial generators in the unitary cobordism ring
	Algebraic topology seminar, Princeton
01.2017	Hermitian curvature flow and positivity
	Differential geometry seminar, UC Irvine
02.2017	Maximum principle for tensors and Ricci flow invariant curvature conditions
	Graduate student seminar, Princeton
02.2017	Metric flows on Hermitian manifolds
	Seminar of the laboratory of algebraic geometry and its applications, Higher School of Economy, Moscow
10.2017	Lie algebraic curvature conditions preserved by Hermitian curvature flow
	Complex analysis and geometry seminar, Rutgers University

Recent conferences & workshops attended

03.2016	*Kähler Geometry, Einstein Metrics, and Generalizations*
	MSRI
05.2016	*Geometric Flows in Riemannian and Complex Geometry*
	MSRI
06.2017	*Complex Analytic and Differential Geometry*
	Grenoble
01.2018	*SCGAS Winter School*
	Irvine
01.2018	*25th SCGAS*
	Irvine

Work experience

2006–2014	**Mathematics teacher**, *High School no.57*, Moscow, Mathematics for gifted students.
2009–2014	**Researcher-developer**, *Yandex*, Moscow, Department of theoretical and applied research.
2011–2014	**Assistant teacher**, *Moscow Institute of Physics and Technology*, Moscow, Seminars on differential geometry and topology for undergraduate students.
2012–2017	**Mathematics teacher**, *High School no.57*, Moscow, Mathematical summer camp for gifted students.
2015–2018	**Assistant in teaching**, *Princeton Univsersity*.