

Igor Krylov

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Employment

Research Fellow in Korea Institute for Advanced Study 08.2018-07.2020
With Prof. Keum as a mentor
Postdoc in University of Bayreuth 09.2017-07.2018
in Prof. Catanese, Prof Bauer, and Prof. Lonne research group
Guest researcher at Max Planck Institute of Mathematics 01.2017-08.2017

Education

PhD in Mathematics
University of Edinburgh, 2013-2017
Supervisor: Professor I. Cheltsov

Specialist in Mathematics
Moscow State University, 2008-2013
Supervisor: Professor Y. G. Prokhorov

Research interests

Birational Geometry, Birational Rigidity, Cremona group, Standard models of Mori fiber spaces, Semiorthogonal Decomposition.

Papers

- *I. Krylov*, Birational geometry of del Pezzo fibrations with terminal quotient singularities, *J. Lond. Math. Soc.* (2) 97, no. 2, 222-246, 2018.
- *I. Krylov*, Rationally connected non Fano type varieties, *Eur. J. Math.*, no. 1, 335-355, 2018.
- *I. Krylov*, *T. Okada* Stable rationality of del Pezzo fibrations of low degree over projective spaces, *International Mathematics Research Notices* 2018.

PREPRINTS

- *H. Ahmadinezhad, M. Fedorchuk, I. Krylov*, [Stability of fibrations over one-dimensional bases](#), 2019.
- *H. Ahmadinezhad, I. Krylov*, [Birational rigidity of orbifold degree 2 del Pezzo fibrations](#), 2017.

Grants

[2016 HIMR Focused Research Grant, 4300 pounds](#)

Recent talks in seminars and conferences

- Birational Geometry, Kahler-Einstein Metrics, and Degenerations, IBS CGP, Pohang, November 2019
- Birational Geometry, Kahler-Einstein Metrics, and Degenerations, ShanghaiTech University, Shanghai, June 2019
- Algebraic Geometry seminar in Brown University, Providence, May 2019
- Algebraic Geometry seminar in Harvard, Boston, May 2019
- Algebraic Geometry seminar in NYU, New-York, May 2019
- Algebraic Geometry seminar in Johns Hopkins University, Baltimore, April 2019
- Algebraic Geometry near-Boston Conference, MIT, Boston, April 2019
- Birational Geometry, Kahler-Einstein Metrics, and Degenerations, Higher School of Economics, Moscow, April 2019
- Derived Categories of Sextic Du Val del Pezzo surfaces III, KIAS, Seoul, March 2019
- Derived Categories of Sextic Du Val del Pezzo surfaces II, KIAS, Seoul, March 2019
- Derived Categories of Sextic Du Val del Pezzo surfaces I, KIAS, Seoul, February 2019
- Instanton Bundles on Quartic del Pezzo Threefold, KIAS, Seoul, January 2019
- Instanton Bundles on Fano Threefolds II, KIAS, Seoul, December 2018
- Instanton Bundles on Fano Threefolds I, KIAS, Seoul, December 2018
- Iskovskih seminar in Steklov Institute, Moscow, November 2018
- Introduction to Derived Categories IV, KIAS, Seoul, October 2018
- Workshop on Algebraic Geometry in Gunsan, Korea, October 2018
- Introduction to Derived Categories I, KIAS, Seoul, September 2018

- Semistability of del Pezzo surfaces, good models and reductions, KIAS, Seoul, August 2018.
- Birational geometry of Rationally connected varieties, KIAS, Seoul, August 2018
- Subgroups of Cremona Groups, Mathematisches Forschungsinstitut Oberwolfach, June, 2018
- Research seminar in Bayreuth university, Bayreuth, Germany, April 2018
- Research seminar in Higher school of economics, Moscow, Russia, January 2018

Organization experience

- [Algebraic Geometry International Conference](#) (KIAS, 2019)
- Learning seminar on derived categories in KIAS (2018-2019).
- Algebra and geometry seminar for PhD students and postdocs in University of Edinburgh (2014-2016)

Teaching experience

I have been tutoring for 6-7 hours a week in Edinburgh university. I was a tutor for the following courses in Edinburgh throughout 2013-2016

- Two semesters of Introduction to Linear algebra in the University of Edinburgh.
- Two semesters of Calculus and applications.
- Four semesters of support workshops for the two courses above.
- One semester of Introduction to Number Theory.
- Three semesters of Differential Geometry.
- Two semesters of Engineering mathematics.

I have also attended the following workshops on teaching.

- Workshop organized by Higher Education Academy for postgraduate students who teach mathematics, statistics, and operational research. (Edinburgh, 2015)
- Workshop "Assessment and Providing Feedback in the Sciences". (Edinburgh, 2015)
- Workshop "Tutoring in the Sciences". (Edinburgh, 2015)

Language Proficiency

Russian: native
English: fluent