

# Curriculum Vitae

Egor Yasinsky

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Born: August 14, 1991 — Vitebsk, Belarus  
Nationality: Belarusian

## Areas of specialization

Birational geometry; Cremona groups; automorphisms of algebraic varieties; group theory.

## Language skills

Russian, Belarusian — native speaker  
English — fluent written and oral skills  
French, German — basic

## Academic Career

- 2009-2014 UNDERGRADUATE: Department of Algebra, Faculty of Mechanics and Mathematics, Lomonosov Moscow State University.  
Thesis: «Subgroups of odd order in the real plane Cremona group»,  
Supervisor: Yuri G. Prokhorov
- 2014-2018 GRADUATE STUDIES: Department of Algebra, Faculty of Mechanics and Mathematics, Lomonosov Moscow State University, Supervisor: Yuri G. Prokhorov
- 17.05.18 PhD (Candidate of Physico-Mathematical Sciences) defended at Steklov Mathematical Institute, Thesis: «Finite subgroups in the Cremona group over the field of real and complex numbers»
- 2018-present POST-DOC at the University of Basel (under supervision of Jérémy Blanc).

## Publications

- 2016 *Subgroups of odd order in the real plane Cremona group*, Journal of Algebra, 461, 87–120, arXiv:1509.08136

2017 *The Jordan constant for Cremona group of rank 2*, Bull. Korean Math. Soc. 2017 Vol. 54, No. 5, 1859-1871, arXiv:1610.09654

## Preprints

2020 *Geometry and automorphisms of non-Kähler holomorphic symplectic manifolds* (joint with F. Bogomolov, N. Kurnosov and A. Kuznetsova), arXiv:2005.01193.

2019 *Automorphisms of real del Pezzo surfaces and the real plane Cremona group*, arXiv:1912.10980.  
*Quotients of groups of birational transformations of cubic Del Pezzo fibrations* (joint with Jérémy Blanc), arXiv:1907.04696.

2018 *Automorphisms of hyperkähler manifolds and groups acting on  $CAT(0)$  spaces* (joint with Nikon Kurnosov), arXiv:1810.09730.

## Awards

2015 The 3rd prize at 19th All-Russian [Möbius Contest](#), Moscow, November 18.

Contest «[Young Russian Mathematics](#)» (ex «Pierre Deligne contest» (2005-2009) and «The Dynasty Foundation contest» (2006-2014)), winner.

## Grants

2018-2019 RFBR grant 18-31-00146\18, researcher.

2016-2018 Russian Science Foundation grant no. 14-50-00005, researcher.

2015-2017 RFFI grant no. 15-01-02164, researcher (principal investigator: Professor Yuri G. Prokhorov)

## Invited talks

2020 *Cremona groups and their subgroups*, Forschungsseminar “Algebraische Geometrie”, HU Berlin, June 24.

*Birational automorphisms of rationally connected threefolds*, Algebraic Geometry Seminar, University of Georgia, Athens, US, March 4.

2019 *Birational automorphisms of del Pezzo fibrations*, Basel-Dijon-EPFL meeting at EPFL, Lausanne, Switzerland, November 7-9.

*Infinite automorphism groups of hyperkähler manifolds*, Hyperkähler event, HSE, Moscow, June 19-23.

*Rationally connected threefolds and quotients of their groups of birational transformations*, Courant Institute of Mathematical Sciences – NYU, New York City, May 13

*Quotients of birational automorphism groups of rationally connected threefolds*, Workshop on birational geometry, Moscow, March 25-29

- 2018 *Automorphisms of hyperkähler manifolds and groups acting on  $CAT(0)$  spaces*, One-day conference dedicated to the memory of V. A. Iskovskikh, Moscow, Russia, December 27
- On recent progress in classification of finite subgroups of the real plane Cremona group*, Journées réelles du CHL, Angers, France, December 3-4
- Hyperkähler manifolds and non-positively curved groups*, Basel-Dijon-EPFL meeting, Dijon, France, October 10-11
- Birational automorphisms of algebraic surfaces over the real and complex numbers*, Moscow – St. Petersburg algebraic geometry symposium for young mathematicians, St. Petersburg, May 10-11
- Finite groups of birational automorphisms*, ASGAR Math 2018: Real algebraic geometry and tropical mathematics, Oslo, Norway, May 2-4.
- 2017 *Finite groups of birational automorphisms*, Basel-EPFL Meeting in Birational Geometry, Basel, Switzerland, November 27-30.
- Boundedness results for groups of birational self-maps*, EDGE Days 2017, University of Edinburgh, Edinburgh, UK, June 26-30.
- The Jordan constant for the plane Cremona group*, VI School-Conference «Lie Algebras, Algebraic Groups and Invariant Theory», Lomonosov Moscow State University, Moscow, January 30 — February 4.
- 2016 *The real Cremona group and its finite subgroups*, Groups of birational automorphisms, HSE, Moscow, November 14–18.
- Finite subgroups of the real plane Cremona group*, Cremona conference, Basel, Switzerland, September 5–16 (poster).
- 2015 *Subgroups of odd order in the real plane Cremona group*, Fifth school-conference on algebraic geometry and complex analysis for young russian mathematicians, Koryazhma, August 17–22.
- Automorphism groups of real Del Pezzo surfaces*, EDGE Days 2015, Edinburgh, June 5.
- Subgroups of odd order in the real plane Cremona group*, International student, postgraduate and young scientist conference «Lomonosov-2015», MSU, Moscow, April 13.

## Other seminar talks

- 2018 *Abelianization of plane Cremona groups over different fields (after S. Zimmermann)*, Iskovskikh Seminar, Steklov Mathematical Institute, Moscow, April 19.
- 2017 *Real forms of algebraic varieties*, Iskovskikh Seminar, Steklov Mathematical Institute, Moscow, October 19.
- Real algebraic threefolds after Kollár*, Iskovskikh Seminar, Steklov Mathematical Institute, Moscow, May 11.

2016

*Abelianisation of the real plane Cremona group (following S. Zimmermann)*, Iskovskikh Seminar, Steklov Mathematical Institute, Moscow, September 22.

*Bertini theorems over finite fields (following Bjorn Poonen)*, Iskovskikh Seminar, Steklov Mathematical Institute, Moscow, February 11.

*Finite subgroups in the real plane Cremona group*, Seminar of the Department of Algebra and Number Theory and of the Department of Algebraic Geometry (Shafarevich Seminar), Steklov Mathematical Institute, Moscow, February 9.

2015 *Factorization theorems for volume preserving birational maps of Calabi–Yau pairs (following A. Corti and A.-S. Kaloghiros)*, Iskovskikh Seminar, Steklov Mathematical Institute, Moscow, October 22.

*The extension of varieties defined by quadratic equations (following S. Lvovsky)*, Iskovskikh Seminar, Steklov Mathematical Institute, Moscow, March 19.

2014 *Dynamics of rational self-maps*, Iskovskikh Seminar, Steklov Mathematical Institute, Moscow, October 9.

*Rational surfaces with a large group of automorphisms (following S. Cantat and I. Dolgachev)*, Iskovskikh Seminar, Steklov Mathematical Institute, Moscow, February 27.

2013 *Topologies of the Cremona groups (following J. Blanc and J.-P. Furter)*, Iskovskikh Seminar, Steklov Mathematical Institute, Moscow, October 10.

*On subgroups of prime order in the plane Cremona group over the field of real numbers*, Iskovskikh Seminar, Steklov Mathematical Institute, Moscow, April 25.

## Tutoring experience

Spring 2020 Teaching assistant for “Algebra II”, University of Basel.

Fall 2019 Lecturer for “Metric geometry”, University of Basel.

Spring 2019 Teaching assistant for “Introduction to Geometric Group Theory”, University of Basel.

Fall 2018 Teaching assistant for “Einführung in die Logik” (Introduction to Logic), University of Basel.

Fall 2016 Algebra I, Lomonosov Moscow State University, Department of Mechanics and Mathematics.

Two lectures on “Introduction to birational geometry”, Laboratory of Algebraic Geometry, HSE, Moscow, November 10-11.