Anna Abasheva Curriculum Vitae

PERSONAL DETAILS

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EDUCATION

PhD student	since Sep.
Columbia University, New York	2020
Master in Mathematics	Sep. 2014 - Jun. 2020
Independent University of Moscow, Moscow	
Bachelor in Mathematics	Sep. 2014 - Jun. 2020
Higher School of Economics, Moscow	

POSITIONS

- since Sep. 2020 Teaching Assistant at Columbia University, New York, NY, USA.
- Sep. 2023 Dec. 2023 Visiting researcher at the Trimester Program "Algebraic geometry: derived categories, Hodge theory, and Chow groups" at Hausdorff Center for Mathematics, Bonn, Germany.
- Oct. 2019 Dec. 2020 research assistant at the Laboratory of Algebraic • Geometry at Higher School of Economics, Moscow, Russia.

PUBLICATIONS

- 1. (with Rodion N. Déev) Complex Surfaces With Many Algebraic Structures. Int. Math. Res. Not., 2023, rnad190. arXiv:2303.10764.
- 2. (with M. Verbitsky) Algebraic dimension and complex subvarieties of hypercomplex nilmanifolds. Adv. Math., 2023(414), 108866. arXiv:2103.05528.
- 3. Feix-Kaledin metric on the total spaces of cotangent bundles to Kähler quotients. Int. Math. Res. Not., 2022(17), 13054-13098. arXiv:2007.05773.

PREPRINTS

1. (with V. Rogov) Shafarevich-Tate groups of holomorphic Lagrangian fibrations, 2021, arXiv:2112.10921

<u>TALKS</u>

Talks at conferences:

1. Non-algebraicity of hypercomplex nilmanifolds, II Junior Poisson Meeting, Zoom, 2021.

Research talks at seminars:

- 1. em Surfaces with many algebraic structures, MAGHI, JTP ""Algebraic geometry: derived categories, Hodge theory, and Chow groups", Hausdorff Institute of Mathematics, Bonn, Germany, December 12, 2023.
- 2. Surfaces with many algebraic structures, KU Leuven, Leuven, Belgium, October 2023.
- 3. Surfaces with many algebraic structures, Leibniz Universität Hannover, Algebraic geometry seminar, Zoom, May 2023.
- 4. Non-algebraicity of hypercomplex nilmanifolds, Higher School of Economics, Seminar of the Laboratory of Algebraic Geometry, Zoom, March 2021.
- 5. From Feix-Kaledin metric to algebraic geometry, joint UCL/KCL differential geometry student seminar, Zoom, June 2021.

Posters:

- 1. Shafarevich-Tate groups of holomorphic Lagrangian fibrations. Geometric Structures (Re)united. University of Illinois Chicago, Chicago, IL, USA. June 2022.
- 2. Shafarevich-Tate groups of holomorphic Lagrangian fibrations. GAeL conference (Géometrie Algébrique en Liberté). Laboratoire de Mathématiques d'Orsay, Université Paris-Saclay, Paris, France. May 2022.

Seminars I (co)organized:

- 1. Non-abelian Hodge correspondence and P=W conjecture, Fall 2022.
- 2. Geometric Invariant Theory, Fall 2020, with P. Lei;

PARTICIPATION IN CONFERENCES

List of schools, workshops and conferences I attended:

- Derived workshop. Hausdorf Center for Mathematics, Bonn, Germany, November 06 - 10, 2023.
- 2. School: K3 surfaces, hyperkähler manifolds, and cubic fourfolds. Hausdorf Center for Mathematics, Bonn, Germany, September 11 15, 2023
- 3. Summer Graduate School Introduction to Derived Algebraic Geometry. MSRI, Berkeley, CA, USA, Dates : June 26 - July 07, 2023.
- 4. Workshop: Hyperkahler quotients, singularities, and quivers. Simons Center, Stony Brook, NY, USA, January 30 February 3, 2023.
- 5. Research Workshop on the Birational Complexity of Algebraic Varieties. Simons Center, Stony Brook, NY, USA, December 12-16, 2022.

- 6. RTG/SCGP Graduate Workshop on the Birational Complexity of Algebraic Varieties. Simons Center, Stony Brook, NY, USA, December 5-9, 2022.
- AGNES (Algebraic geometry Northeastern series). UMass, Amherst, MA, USA, Nov 18-20, 2022.
- 8. Conference on Higher Dimensional Geometry. Simons Foundation, New York, NY, USA, Oct 24-28, 2022.
- 9. Algebraic Geometry, Mathematical Physics, and Solitons. Celebrating the work of Igor Krichever. Columbia University, New York, NY, USA, Oct 7–9, 2022.
- Conference on Higher Dimensional Geometry. Simons Center, Stony Brook, NY, USA, Aug 22-26, 2022.
- 11. Derived Categories, Moduli Spaces, and Hyperkähler Varieties. University of Michigan, MI, USA, Jul 30–Aug 5, 2022.
- Geometric Structures (Re)united. University of Illinois Chicago, Chicago, IL, USA. Jun 13–17, 2022.
- GAeL conference (Géometrie Algébrique en Liberté). Laboratoire de Mathématiques d'Orsay, Université Paris-Saclay, Paris, France. May 23–27, 2022.
- 14. Deformations of Geometric Structures in Current Mathematics: "A celebration of the works of Masatake Kuranishi". Columbia University, May 3-6, 2022.
- 15. Programa de Verão (Summer program). Rio de Janeiro, Brazil, Jan 6 Feb 28, 2020.
- Algebra and geometry. Yaroslavl, Russia, June. Attended in years 2015–17, 2019, 2021.
- 17. Arakelov geometry and diophantine applications. Grenoble, France, June 2017.
- 18. Geometry on Fontanka. Saint-Petersburg, Russia, summer 2017.
- 19. Modern mathematics. Dubna, Russia, summer 2014, 2015.
- 20. Modern mathematics. Bremen, Germany, summer 2015.