

CURRICULUM VITAE

Name: Kuznetsov Alexander

Date of birth: November 1, 1973.

Citizenship: Russia

Current address: Algebraic Geometry Section,
Steklov Mathematical Institute, Russian Academy of Sciences,
Gubkina str. 8, 119991, Moscow, Russia

Telephone Number: (7499) 135-25-49

E-mail: akuznet@mi-ras.ru

Education:

- 1990–1995 student in Moscow State University
- 1995–1998 graduate student in Moscow State University and Independent University of Moscow

Current Position: Leading Researcher at Steklov Mathematical Institute

Ph.D. Thesis: 1998, “Vector bundles on Fano threefolds, instantons and birational transforms”
under supervision of Alexei Bondal.

Habilitation: 2008, “Homological Projective Duality”.

Research interests: Algebraic geometry, Noncommutative algebraic geometry, Derived categories of coherent sheaves, Mirror Symmetry, Fano varieties.

Awards:

- Moebius fellowship, 1997
- EMS Prize, 2008

Family status: I am married, with four children.

POSITIONS HELD

- 1997, January–February: visitor, Max-Planck Institut für Mathematik, Bonn
- 1998, February–March: visitor, Max-Planck Institut für Mathematik, Bonn
- 1999, January–March: visitor, Institut des Hautes Études Scientifiques, Paris
- September 1999 – April 2000: member of Institute for Advanced Study, Princeton
- 2001, January–February: visitor, University of Chicago
- 2002, January: visitor, Université Paul Sabatier, Toulouse
- 2002, February: visitor, Institut de Mathématiques de Luminy, Marseille
- 2006, June: visitor, Institut de Mathématiques de Luminy, Marseille
- 2007, June: visitor, SISSA, Trieste
- 2008, June: visitor, University of Barcelona
- 2010, June–July: visitor, SISSA, Trieste
- 2012, January: visitor, Bloomington, Indiana University
- 2012, August: visitor, SISSA, Trieste
- 2013, August: visitor, SISSA, Trieste
- 2014, January: visitor, ENS, Paris
- 2014, July–August: visitor, SISSA, Trieste
- 2015, January: visitor, Imperial College, London
- 2015, June–July: visitor, SISSA, Trieste
- 2016, January: visitor, ENS, Paris
- 2016, August: visitor, ICTP, Trieste
- 2017, August: visitor, SISSA, Trieste
- 2018, January: visitor, ENS, Paris
- 2018, August: visitor, SISSA, Trieste
- 2019, August: visitor, SISSA, Trieste

2003.

- *Derived categories of cubic and V_{14} threefolds*, “Geometry of moduli spaces”, Lille, June 10–14, 2003.

2004.

- *Derived categories of plane sections of some Fano manifolds*, “Noncommutative Algebra and Algebraic Geometry”, Mathematics Institute, University of Warwick, June 14–18, 2004.

2005.

- *Homological Projective Duality and Triangulated Categories of Singularities*, “Coherent Sheaves and Mirror Symmetry”, University of Cambridge, May 19–22, 2005.
- *Homological Projective Duality and Triangulated Categories of Singularities*, “Birational Geometry, Derived Categories and Singularities”, Steklov Math Institute, Moscow, June 14–18, 2005.

2006.

- *Derived categories and hyperplane sections*, “Classification Problems and Mirror Duality”, Steklov Math Institute, Moscow, February 27 – March 3, 2006.
- *Derived categories of Fano 3-folds*, “Workshop on Derived Categories of Coherent Sheaves”, Korea Institute for Advanced Study, Seoul, May 1–4, 2006.
- *Homological Projective Duality*, “Satellite Conference on Algebraic Geometry”, Segovia, Spain, August 16–19, 2006.

2007.

- *Homological Projective Duality*, “Homological Mirror Symmetry and Applications I”, Institute for Advanced Study, Princeton, January 22–26, 2007.
- *Derived categories of quadric fibrations and intersections of quadrics*, “Workshop on Algebraic Geometry and Physics 2007”, Korea Institute for Advanced Study, Seoul, June 25 – June 29, 2007.
- *Symplectic structures on moduli spaces of sheaves via the Atiyah class*, “Modular Forms and Moduli Spaces”, Saint-Petersburg, Russia, July 2–7, 2007.
- *Categorical resolutions of singularities*, “Program on Algebraic, Symplectic Geometry and Physics”, EPFL, Lausanne, Switzerland, August 20 – September 7, 2007.
- *Categorical resolutions of singularities*, “Categorical Aspects of Algebraic Geometry in Mirror Symmetry”, Research Institute for Mathematical Sciences, Kyoto, December 3–7, 2007.

2008.

- *Derived categories of Fano 3-folds*, “Workshop on Homological Mirror Symmetry and Related Topics”, University of Miami, January 21–26, 2008.
- *Derived categories of Fano 3-folds*, “Bundles, gerbes and derived categories in string theory”, University of Salamanca, May 14–16, 2008.
- *Derived categories and rationality of cubic fourfolds*, 5-th European Congress of Mathematics, Amsterdam, July 14–18, 2008.
- *Derived categories of Fano 3-folds*, 60 Miles — a meeting to celebrate Miles Reid’s sixtieth birthday, London, July 16–18, 2008.
- *Exceptional collections on $SGr(2, 2n)$ and $OGr(2, 2n + 1)$* , “Exceptional collections and degenerations of varieties”, Tokyo, September 1–5, 2008.

2009.

- *Fractional Calabi–Yau triangulated categories*, “Workshop on Homological Mirror Symmetry and Related Topics”, Miami, January 19–24, 2009.
- *Calabi–Yau categories*, “Classification of Algebraic Varieties”, Schiermonnikoog, May 10–15, 2009.
- *Derived categories of coherent sheaves and rationality of algebraic varieties*, “Contemporary Mathematics”, Moscow–St.-Petersburg, June 08–12, 2009.
- *Derived categories of Fano 3-folds*, “Geometry of Algebraic Varieties”, Moscow, June 29–July 3, 2009.

2010.

- *Hochschild homology and cohomology of admissible subcategories*, “Workshop on Homological Mirror Symmetry and Related Topics”, Miami, January 18–23, 2010.
- *Exceptional collections on isotropic Grassmannians*, “Algebraic Geometry: Methods, Relations, and Applications”, Moscow, February 24–26, 2010.
- *Derived categories and birational invariants*, “Geometry at Large”, Vienna, May 3–7, 2010.
- *Hochschild homology and cohomology of admissible subcategories*, “Perspectives on Algebraic Varieties”, Levico Terme (Trento), September 6–11, 2010.
- *Derived categories of Enriques surfaces and quartic double solids*, “Birational Geometry”, Edinburgh, December 6–10, 2010.

2011.

- *Exceptional collections on homogeneous varieties*, “Derived Categories 2011 Tokyo”, Tokyo, January 24–28, 2011.
- *Instanton bundles on Fano threefolds*, “Instantons in complex geometry”, Moscow, March 14–18, 2011.
- *Exceptional collections on Grassmannians of classical groups*, “Derived Categories”, Cambridge, April 11–15, 2011.
- *Enriques surfaces and Artin–Mumford quartic double solids*, “Homological Mirror Symmetry and Category Theory”, Split, Croatia, 11–15, 2011.
- *Enriques surfaces and Artin–Mumford quartic double solids*, “Automorphic forms and Moduli spaces”, CIRM, Luminy, October 10–14, 2011.

2012.

- *Categorical resolutions of singularities*, “Workshop on Homological Mirror Symmetry and Related Topics”, Miami, January 23–27, 2012.
- *Categorical resolutions of singularities*, “Algorithmic and Experimental Methods in Algebra, Geometry and Number Theory”, Hanover, February 27–March 1, 2012.
- *Categorical resolutions of singularities*, “Noncommutative Algebraic Geometry and its Applications to Physics”, Leiden, March 19–23, 2012.
- *Categorical resolutions of singularities*, “Birational And Affine Geometry”, Moscow, April 23–27, 2012.
- *Homological Projective Duality*, “Relation of String Theory to Gauge Theories and Moduli Problems of Branes”, Moscow, September 10–14, 2012.
- **minicourse** *Homological Projective Duality*, “Homological Projective Duality and Noncommutative Geometry”, Warwick, October 8–13, 2012.
- *Heights of exceptional collections and Hochschild cohomology of quasiphantoms*, “Algebraic and Differential Geometry of Andrei Tyurin”, Moscow, October 24–26, 2012.
- *Homological Projective Duality I,II*, “Homological Projective Duality and Quantum Gauge Theory”, Tokyo, IPMU, November 12–16, 2012.

2013.

- *Categorical resolutions of singularities*, “Higher Dimensional Algebraic Geometry”, Tokyo, January 7–11, 2013.
- **minicourse** *Derived categories of coherent sheaves in birational geometry*, “Géométrie Algébrique et Géométrie Complexe”, Luminy, January 28–February 1, 2013.
- *On a noncommutative blowup*, “Birational Geometry and Geometric Invariant Theory”, Vienna, May 21–24, 2013.
- **minicourse** *Derived Categories of Coherent Sheaves*, “Géométrie Algébrique en Liberté”, Stockholm, June 24–28, 2013.
- **minicourse** *Derived Categories of Coherent Sheaves and Moduli Spaces*, “Geoquant 2013”, Vienna, August 19–30, 2013.
- *Higher blowups*, “Geometry of Algebraic Varieties” dedicated to the memory of V. A. Iskovskikh, Moscow, October 22–25, 2013.

2014.

- *Higher blowups*, “Conference on Homological Mirror Symmetry”, Miami, January 27–February 1, 2014.
- *Moduli spaces of sheaves on pfaffian cubic fourfolds via derived categories*, “Moduli spaces of irreducible symplectic varieties, cubics and Enriques surfaces”, Lille, March 24–28, 2014.
- *Calabi–Yau subcategories and Fano manifolds of degree 10*, “A workshop on the Chow group of holomorphically symplectic manifolds”, Moscow, May 19–23, 2014.
- *On K3 fourfolds of K3 type*, “Landau–Ginzburg Theory and Fano Varieties”, Gyeongju, May 26–30, 2014.
- **minicourse** *Derived categories of cubic 4-folds*, Summer school “Derived categories”, Nantes, June 23–27, 2014.
- *Semiorthogonal decompositions in algebraic geometry*, International Congress of Mathematicians 2014, Seoul, August 13–21, 2014.
- **minicourse** *Semiorthogonal decomposition of derived categories*, “Introductory School on Derived Categories”, Warwick, September 8–12, 2014.
- *Refined blowups*, “DG-enhancements and higher category methods”, Warwick, December 8–12, 2014.

2015.

- *On some K3 fourfolds*, “Algebraic Geometry”, MFO, Oberwolfach, Germany, March 16–20, 2015.
- **minicourse** *Derived categories and birational geometry* and talk *Derived categories of Gushel–Mukai varieties and duality*, “New Techniques in Birational Geometry”, Stony Brook University, Stony Brook, USA, April 7–11, 2015.
- **lecture course** *Derived categories view on rationality problems*, “Rationality Problems in Algebraic Geometry”, CIME, Levico Terme, Italy, June 22–27, 2015.
- *Noncommutative K3 surfaces*, “Interactions between Geometry and Physics”, SISSA, Guarujá, Brazil, August 17–21, 2015.
- *Birational isomorphisms of Gushel–Mukai varieties*, “Projective Algebraic Geometry”, HSE, Moscow, September 7–12, 2015.
- *On categorical joins*, “Categorical and Analytic Invariants in Algebraic Geometry — I”, Steklov Math Institute, Moscow, September 14–18.
- *Geometry and moduli spaces of Gushel–Mukai varieties*, “Moduli spaces in Geometry”, CIRM, Luminy, November 26–30, 2015.
- *Categorical joins — II*, “Categorical and Analytic Invariants in Algebraic Geometry — II”, IPMU, Kashiwa, November 16–20, 2015.

2016.

- *Rectangular Lefschetz decompositions and fractional Calabi–Yau categories*, “Triangulated Categories in Algebra, Geometry and Topology”, University of Stuttgart, March 14–18, 2016.
- *Categorical joins*, “Homological Algebraic Geometry”, University of Sheffield, June 9–10, 2016.
- **minicourse** *Categorical resolutions of singularities* and talk *Derived categories and birational properties of Gushel–Mukai varieties*, “New methods in birational geometry”, University of Toulouse, June 22–July 1, 2016.
- **minicourse** *Derived categories and moduli spaces*, “Advanced School and Workshop on Moduli Spaces, Mirror Symmetry and Enumerative Geometry”, ICTP, Trieste, August 1–19, 2016.
- *On double covers of quadratic and Lagrangian degeneracy loci*, “Categorical and analytic invariants in Algebraic geometry 3”, HSE, Moscow, September 12–16, 2016.
- *Categorical joins and homological projective duality*, “Non-commutative, derived and homotopical methods in geometry”, University of Antwerp, September 19–24, 2016.
- *Exceptional collections in surface-like categories*, “Categorical and Analytic invariants 4”, IPMU, Kashiwa, November 14–18, 2016.

2017.

- *Derived categories of families of sextic del Pezzo surfaces*, “Derived category and birational geometry”, Osaka University, February 20–23, 2017.
- *Birational geometry and derived category of Gushel–Mukai fourfolds, I, II*, “Categorical approach to rationality”, ESI, Vienna, May 2–5, 2017.
- *D-equivalence, L-equivalence and families of quadrics*, “Closing workshop — future directions”, ESI, Vienna, May 15–19, 2017.
- **minicourse** *Fano varieties*, “Fontanka Summer School”, POMI, Saint-Petersburg, July 3–8, 2017.
- *Quadric fibrations in the Grothendieck ring of varieties with an application to Mukai dual K3 surfaces*, “Higgs Bundles, K3 Surfaces and Moduli”, Humboldt Universität, Berlin, July 10–12, 2017.
- *D-equivalence and L-equivalence*, “Algebraic Geometry”, MFO, Oberwolfach, September 24–30, 2017.
- *Residual categories for Lefschetz exceptional collections*, “Categorical and Analytic Invariants in Algebraic Geometry V”, Osaka University, November 27 – December 1, 2017.

2018.

- *Derived categories of singular toric surfaces*, “Sheaves, Curves and Moduli”, University of Stavanger, April 16–20, 2018.
- *On 5-dimensional minifolds and their Hilbert schemes of lines*, “Classical algebraic geometry”, MFO Oberwolfach, July 15–21, 2018.
- *D- and L-equivalence and families of quadrics*, “Motives and their applications”, Euler International Mathematical Institute, September 10–14, 2018.
- *Semiorthogonal decompositions of singular surfaces*, “Constructions and Obstructions in Birational Geometry”, University of Edinburgh, November 05–09, 2018.
- *Semiorthogonal decompositions of singular surfaces*, “Categorical and analytic invariants in algebraic geometry VI”, University of Sapporo, November 26–30, 2018.

2019.

- *Rationality of prime Fano 3-folds over nonclosed fields*, “Kodaira Workshop”, Loughborough University, March 15–16, 2019.
- *Rationality of prime Fano 3-folds over nonclosed fields*, “Workshop on birational geometry”, Moscow, HSE, March 25–29, 2019.
- *Intermediate Jacobian of Gushel–Mukai threefolds*, “Korean–Russian Algebraic Geometry Meeting”, Moscow, HSE, April 5–7, 2019.
- *Intermediate Jacobian of Gushel–Mukai threefolds and Rationality of Fano 3-folds over nonclosed fields*, “Rationality of algebraic varieties”, Schiermonnikoog, April 15–19, 2019.
- **minicourse** *Derived categories and moduli spaces*, “Helvetic Algebraic Geometry Seminar”, Konolfingen, Switzerland, June 05–08, 2019.
- *Homological projective geometry*, “Geometry and Arithmetic of Algebraic Varieties”, Hausdorff Center for Mathematics, June 11–14, 2019.
- *Rationality of Fano 3-folds over non-closed fields*, “Petersburg Motives”, Euler Institute, St. Petersburg, September 02–06, 2019.
- *Rationality of Fano 3-folds over non-closed fields*, “The Geometry of Derived Categories”, University of Liverpool, September 09–13, 2019.
- *Rationality of Fano 3-folds over non-closed fields*, “Géométrie des variétés algébriques”, CIRM at Luminy, September 30–October 4, 2019.
- *Semiorthogonal decompositions and Abel–Jacobi maps*, “Categorical and Analytic Invariants in Algebraic Geometry VII”, Osaka University, November 25–29, 2019.
- *K3 categories and derived categories of quadric fibrations*, “School on Bridgeland Stability”, University of Warwick, December 16–20, 2019.

2020.

- *Residual categories and quantum cohomology*, “Belgian–Dutch Algebraic Geometry Day”, University of Leuven, February 14, 2020.
- *Overview of HPD*, “GLSMs – 2020” (Zoom conference), August 20, 2020.
- *Rationality and derived categories of some Fano threefolds over non-closed fields*, “Derived, Birational, and Categorical Algebraic Geometry” (Zoom conference), Banff, November 2, 2020.
- **minicourse** *Exceptional collections on homogeneous varieties of simple algebraic groups*, “Workshop on Moduli Spaces and Stability” (Zoom conference), December 7–10, 2020.
- *Simultaneous categorical resolutions of singularities*, “Categories and Birational Geometry” (Zoom conference), December 14, 2020.

2021.

- *Categorical absorption of singularities and nodal nonfactorial Fano threefolds*, “Conference on Birational Geometry (Shokurov 70 + 1)”, Steklov Mathematical Institute, May 17–18, 2021.
- *Smooth hyperplane sections of the Cayley plane*, “FanoHK kick-off conference” (Zoom conference), May 27, 2021.
- *Rationality over non-closed fields of Fano threefolds with higher geometric Picard rank*, “Recent Developments in Algebraic Geometry, Arithmetic and Dynamics Part 1” (Zoom conference), National University of Singapore, June 10–18, 2021.
- **minicourse** *Fractional Calabi–Yau properties of residual categories*, “Interactive Workshop & Hausdorff School” (Zoom conference), September 6–10, 2021.
- *Simultaneous categorical resolutions*, “Noncommutative shapes: halfway event” (Zoom conference), September 20, 2021.
- **minicourse** *Derived categories of Fano varieties*, “Derived Categories of Fano Varieties, Hyperkähler Varieties and their Period Maps” (Zoom conference), November 8–12, 2021.
- *Quantum cohomology and derived categories*, “Nonlinear waves and Frobenius structures in geometry and physics”, November 17–19, 2021.

2022.

- *Lefschetz collections*, “ANR FanoHK thematic workshop in Dijon” (Zoom conference), January 19, 2022.
- *Higher-dimensional del Pezzo varieties*, “Géométrie Algébrique (en l’honneur de Claire Voisin)” (Zoom talk), May 17, 2022.
- *Derived categories of families of Fano threefolds*, “Fano+HK” (Zoom talk), May 31, 2022.
- *From quartic double solids to Gushel–Mukai threefolds through derived categories*, “New Perspectives on Hyperkähler Manifolds (Markushevich 62)” (Zoom talk), June 13, 2022.
- *Homological algebraic geometry*, Virtual ICM 2022 plenary talk, July 8, 2023.
- *Categorical absorption of singularities*, “Noncommutative shapes (Van den Bergh 62)”, University of Antwerp, September 12–16, 2022.
- **minicourse** *K3 surfaces*, Novosibirsk, October 19–21, 2022.

2023.

- **minicourse** *Automorphisms of 3-dimensional Fano varieties*, “Lie Algebras, Algebraic Groups and Invariant Theory”, HSE, Moscow, January 28 – February 2, 2023.
- **minicourse** *Derived categories and rationality of Fano threefolds* and talk *On 1-nodal Fano threefolds*, “Higher Dimensional Algebraic Geometry”, NCTS, Taipei, March 13–24, 2023.
- *Mukai bundles on curves, K3 surfaces, and Fano threefolds*, “Conference on algebra, algebraic geometry, and number theory on the occasion of academician Igor Rostislavovich Shafarevich 100th birthday”, Steklov Math Institute, June 5–9, 2023.
- *Hilbert schemes of quadrics on Gushel–Mukai varieties*, “Special session of ERC Synergy Grant”, Paris, June 14–15, 2023.
- *Horospherical variety of type G_2* , “Algebraic groups: the White Nights season III”, Euler Institute, Saint Petersburg, July 10–14, 2023.
- *One-nodal degenerations of Fano threefolds*, Sino–Russian Hybrid Conference “Geometry and Physics”, August 28–31, 2023.
- *Categorical absorption of singularities*, “Birational Geometry and Quantum Invariants”, Simons Center, Stony Brook, October 30–November 3, 2023.
- *Derived categories of Fano threefolds and degenerations*, “Derived Workshop”, Hausdorff Institute, Bonn, November 06–10, 2023.

2024.

- *One-nodal Fano threefolds*, “Fano and Hyperkähler varieties in Genova”, Genova, January 22–26, 2024.
- *Derived categories of families of Fano threefolds*, Conference “Birational geometry and Fano varieties” dedicated to Yu.G. Prokhorov 60-th anniversary, Moscow, March 12–15, 2024.
- *Categorical absorption of singularities* (online talk), “Recent Developments in Noncommutative Algebraic Geometry”, MSRI, April 8–12, 2024.
- **minicourse** *Exceptional collections on homogeneous spaces*, Spring school-conference, Saint Petersburg, May 1–5, 2024.
- *Derived categories of families of Fano threefolds*, “Algebro-geometric techniques for physics: bundles, stacks and supergeometry”, Trieste, June 3–10, 2024.
- *Categorical absorption of singularities*, EPIGA 2024 conference, Paris, June 10–14, 2024.
- *Exceptional collection on the coadjoint Grassmannian of type F_4* , “Algebraic groups: the White Nights season IV”, Saint Petersburg, July 8–12, 2024.
- *On Mukai’s description of Fano threefolds*, “Annual memorial conference dedicated to the memory of Andrei Nikolaevich Tyurin”, Moscow, October 25, 2024.
- *Hyperbolic equivalence of quadric bundles*, Sino–Russian Conference “Geometry and Physics”, Moscow, November 5–9, 2024.
- *Mukai Models of K3 Surfaces and Fano Threefolds*, “Algebraic geometry in Taipei”, Taipei, December 2–6, 2024.

LECTURE COURSES

- 1997–1998, IUM, Hilbert schemes of points on surfaces (after H. Nakajima);
- 1998–1999, IUM, Discriminants, Resultants and Multidimensional Determinants (after I. Gelfand, M. Kapranov, and A. Zelevinsky)
- 2000–2001, IUM, Vector bundles on complex projective spaces (after C. Okonek, M. Schneider, and H. Spindler)
- 2002–2003, IUM, Algebra.
- 2004, IUM, Algebraic Topology.
- 2006–2007, IUM, Vector bundles on complex projective spaces (after C. Okonek, M. Schneider, and H. Spindler)
- 2008, IUM–Steklov Institute, Homological algebra.
- 2010, IUM–Steklov Institute, Algebraic geometry.
- 2012, IUM–Steklov Institute, Derived categories of coherent sheaves.
- 2013, IUM–Steklov Institute, DG-categories.
- 2015, IUM–Steklov Institute, Vector bundles on complex projective spaces.
- 2017, IUM–Steklov Institute, Higher-dimensional projective geometry.

LIST OF PUBLICATIONS

- [1] Alexander Kuznetsov. Quadric bundles and hyperbolic equivalence. *Geom. Topol.*, 28(3):1287–1339, 2024.
- [2] Alexander Kuznetsov and Yuri Prokhorov. Rationality over nonclosed fields of Fano threefolds with higher geometric Picard rank. *J. Inst. Math. Jussieu*, 23(1):207–247, 2024.
- [3] Alexander Kuznetsov and Evgeny Shinder. Categorical absorptions of singularities and degenerations. *Épjournal Géom. Algébrique*, (Special volume in honour of Claire Voisin):Art. 12, 42, 2023.
- [4] A. G. Kuznetsov. Explicit deformation of the horospherical variety of type G_2 . *Mat. Sb.*, 214(8):63–73, 2023.
- [5] Alexander Kuznetsov. Semiorthogonal decompositions in families. In *ICM—International Congress of Mathematicians. Vol. 2. Plenary lectures*, pages 1154–1200. EMS Press, Berlin, [2023] ©2023.
- [6] A. G. Kuznetsov and Yu. G. Prokhorov. On higher-dimensional del Pezzo varieties. *Izv. Ross. Akad. Nauk Ser. Mat.*, 87(3):75–148, 2023.
- [7] Alexander Kuznetsov and Yuri Prokhorov. Rationality of Fano threefolds over non-closed fields. *Amer. J. Math.*, 145(2):335–411, 2023.
- [8] Alexander Kuznetsov and Alexander Perry. Categorical cones and quadratic homological projective duality. *Ann. Sci. Éc. Norm. Supér. (4)*, 56(1):1–57, 2023.
- [9] Pieter Belmans, Alexander Kuznetsov, and Maxim Smirnov. Derived categories of the Cayley plane and the coadjoint Grassmannian of type F. *Transform. Groups*, 28(1):9–34, 2023.
- [10] Alexander Kuznetsov. Simultaneous categorical resolutions. *Math. Z.*, 300(4):3551–3576, 2022.
- [11] Joseph Karmazyn, Alexander Kuznetsov, and Evgeny Shinder. Derived categories of singular surfaces. *J. Eur. Math. Soc. (JEMS)*, 24(2):461–526, 2022.
- [12] Alexander Kuznetsov and Yuri Prokhorov. Rationality of Mukai varieties over non-closed fields. In *Rationality of varieties*, volume 342 of *Progr. Math.*, pages 249–290. Birkhäuser/Springer, Cham, [2021] ©2021.
- [13] Alexander Kuznetsov and Alexander Perry. Homological projective duality for quadrics. *J. Algebraic Geom.*, 30(3):457–476, 2021.
- [14] Alexander Kuznetsov and Alexander Perry. Categorical joins. *J. Amer. Math. Soc.*, 34(2):505–564, 2021.
- [15] Alexander Kuznetsov. Derived categories of families of sextic del Pezzo surfaces. *Int. Math. Res. Not. IMRN*, (12):9262–9339, 2021.
- [16] Alexander Kuznetsov and Maxim Smirnov. Residual categories for (co)adjoint Grassmannians in classical types. *Compos. Math.*, 157(6):1172–1206, 2021.
- [17] Olivier Debarre and Alexander Kuznetsov. Gushel-Mukai varieties: intermediate Jacobians. *Épjournal Géom. Algébrique*, 4:Art. 19, 45, 2020.
- [18] Olivier Debarre and Alexander Kuznetsov. Double covers of quadratic degeneracy and Lagrangian intersection loci. *Math. Ann.*, 378(3-4):1435–1469, 2020.
- [19] Olivier Debarre and Alexander Kuznetsov. Gushel-Mukai varieties: moduli. *Internat. J. Math.*, 31(2):2050013, 59, 2020.
- [20] Ivan Cheltsov, Alexander Kuznetsov, and Konstantin Shramov. Coble fourfold, \mathfrak{S}_6 -invariant quartic threefolds, and Wiman-Edge sextics. *Algebra Number Theory*, 14(1):213–274, 2020.
- [21] Alexander Kuznetsov and Maxim Smirnov. On residual categories for Grassmannians. *Proc. Lond. Math. Soc. (3)*, 120(5):617–641, 2020.
- [22] Olivier Debarre and Alexander Kuznetsov. Gushel-Mukai varieties: linear spaces and periods. *Kyoto J. Math.*, 59(4):897–953, 2019.
- [23] Alexander Kuznetsov. Calabi-Yau and fractional Calabi-Yau categories. *J. Reine Angew. Math.*, 753:239–267, 2019.
- [24] A. G. Kuznetsov. Embedding derived categories of an Enriques surface into derived categories of Fano varieties. *Izv. Ross. Akad. Nauk Ser. Mat.*, 83(3):127–132, 2019.
- [25] A. G. Kuznetsov. Letter to the editors: “On linear sections of the spinor tenfold. I” (Russian) [erratum to MR3833474]. *Izv. Ross. Akad. Nauk Ser. Mat.*, 82(5):227–228, 2018.
- [26] Alexander Kuznetsov and Evgeny Shinder. Grothendieck ring of varieties, D- and L-equivalence, and families of quadrics. *Selecta Math. (N.S.)*, 24(4):3475–3500, 2018.
- [27] A. G. Kuznetsov. On linear sections of the spinor tenfold. I. *Izv. Ross. Akad. Nauk Ser. Mat.*, 82(4):53–114, 2018.
- [28] Alexander Kuznetsov. Derived equivalence of Ito-Miura-Okawa-Ueda Calabi-Yau 3-folds. *J. Math. Soc. Japan*, 70(3):1007–1013, 2018.
- [29] Alexander Kuznetsov and Alexander Perry. Derived categories of Gushel-Mukai varieties. *Compos. Math.*, 154(7):1362–1406, 2018.
- [30] Alexander Kuznetsov and Yuri Prokhorov. Prime Fano threefolds of genus 12 with a \mathbb{G}_m -action and their automorphisms. *Épjournal Géom. Algébrique*, 2:Art. 3, 14, 2018.
- [31] Alexander G. Kuznetsov, Yuri G. Prokhorov, and Constantin A. Shramov. Hilbert schemes of lines and conics and automorphism groups of Fano threefolds. *Jpn. J. Math.*, 13(1):109–185, 2018.
- [32] Michael Finkelberg, Alexander Kuznetsov, Leonid Rybnikov, and Galyna Dobrovolska. Towards a cluster structure on trigonometric zastava. *Selecta Math. (N.S.)*, 24(1):187–225, 2018.

- [33] Anton Fonarev and Alexander Kuznetsov. Derived categories of curves as components of Fano manifolds. *J. Lond. Math. Soc. (2)*, 97(1):24–46, 2018.
- [34] Olivier Debarre and Alexander Kuznetsov. Gushel-Mukai varieties: classification and birationalities. *Algebr. Geom.*, 5(1):15–76, 2018.
- [35] A. G. Kuznetsov. Exceptional collections in surface-like categories. *Mat. Sb.*, 208(9):116–147, 2017.
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