

Kęstutis Česnavičius

Institut de Mathématiques de Jussieu - Paris Rive Gauche
Sorbonne Université
4 place Jussieu, Bureau 15-25 411
F-75005 Paris, France

Email: kestutis@imj-prg.fr
Website: <https://webusers.imj-prg.fr/~kestutis.cesnavicius>

Academic positions

- 10/2025 – present **Sorbonne Université, IMJ-PRG**, Paris, France.
Directeur de recherche du CNRS
- 12/2017 – 9/2025 **Université Paris-Saclay**, Orsay, France.
Chargé de recherche du CNRS
- 8/2017 – 11/2017 **Mathematical Institute of the University of Bonn**, Bonn, Germany.
Wissenschaftlicher Mitarbeiter
- 8/2014 – 7/2017 **Miller Institute for Basic Research in Science**, Berkeley, USA.
Miller Research Fellow

Visiting positions

- Fall/Spring 23/24 **Institute for Advanced Study**, Princeton, USA.
von Neumann Fellow in the special year on p -adic geometry
- 3/2019 – 5/2019 **Mathematical Sciences Research Institute**, Berkeley, USA.
Research Member in the program Derived Algebraic Geometry
- 7/2012 – 12/2012 **Bernoulli Center at the EPFL**, Lausanne, Switzerland.
Guest in the program Rational Points and Algebraic Cycles

Education

- 9/2020 **Université Paris-Saclay**, Orsay, France.
Habilitation à diriger des recherches
- 9/2010 – 6/2014 **Massachusetts Institute of Technology**, Cambridge, USA.
PhD in Mathematics; thesis advisor: Bjorn Poonen
- 9/2007 – 6/2010 **Jacobs University**, Bremen, Germany.
BSc in Mathematics

Selected awards and honors

Prix Jacques Herbrand de l'Académie de Sciences, France, 2023
Prize of the Lithuanian Mathematical Society, 2018
Charles W. and Jennifer C. Johnson Prize, MIT, 2014
Praecis Presidential Graduate Fellowship, MIT, 2010 – 2011

Gold medal, International Mathematical Olympiad 2007, Vietnam

Grants and Funding

- Project website **Simons Collaboration on Perfection in Algebra, Geometry and Topology**, 2023 – 2027 (an \$8M initiative of the Simons Foundation): PI alongside B. Antieau, B. Bhatt, D. Clausen, P. Colmez, T. Gee, A.J. de Jong, M. Emerton, J. Lurie, A. Mathew, W. Nizioł, M. Olsson, P. Scholze
- Project website **Member of the ANR project COLOSS**, 2020 – 2024
- Project overview **European Research Council Starting Grant**, 2019 – 2025

Publications and preprints

- arXiv:2505.00505 **Generically trivial torsors under constant groups**, with Alexis Bouthier and Federico Scavia, *submitted*.
- arXiv:2303.11710 **The analytic topology suffices for the B_{dR}^+ -Grassmannian**, with Alex Youcis, *accepted to the Proceedings of the Simons Symposium on p-adic Hodge theory (2022)*.
- doi:10.4171/... **Unramified Grothendieck–Serre for isotropic groups**, with Roman Fedorov, *accepted to the Journal of the European Mathematical Society (JEMS)*.
- doi:10.5802/... **The affine Grassmannian as a presheaf quotient**, *C. R. Math. Acad. Sci. Paris*, **363** (2025), 523–532.
- doi:10.4310/... **Torsors on the complement of a smooth divisor**, *Camb. J. Math.*, **12** (2024), no. 4, 903–936.
- doi:10.4171/... **The Manin constant and the modular degree**, with Michael Neururer and Abhishek Saha, *J. Eur. Math. Soc. (JEMS)*, **26** (2024), no. 2, 573–637.
- doi:10.4007/... **Purity for flat cohomology**, with Peter Scholze, *Ann. of Math. (2)*, **199** (2024), no. 1, 51–180.
- doi:10.24033/... **Torsors on loop groups and the Hitchin fibration**, with Alexis Bouthier, *Ann. Sci. Éc. Norm. Supér.*, **55** (2022), no. 3, 791–864.
- doi:10.1007/... **Problems about torsors over regular rings (with an appendix by Yifei Zhao)**, *Acta Math. Vietnam.*, **47** (2022), no. 1, 39–107.
- doi:10.1017/... **Grothendieck–Serre in the quasi-split unramified case**, *Forum Math. Pi*, **10** (2022), e9, 30 pp.
- doi:10.24033/... **Reconstructing a variety from its topology**, *Astérisque*, **430**, Séminaire Bourbaki. Vol. 2019/2021. Exposé 1175 (2021), 275–293.
- doi:10.1215/... **Macaulayfication of Noetherian schemes**, *Duke Math. J.*, **170** (2021), no. 7, 1419–1455.
- doi:10.14231/... **Grothendieck–Lefschetz for vector bundles**, *Algebr. Geom.*, **7** (2020), no. 4, 503–511.
- doi:10.1112/... **The A_{inf} -cohomology in the semistable case**, with Teruhisa Koshikawa, *Compos. Math.*, **155** (2019), no. 11, 2039–2128.
- doi:10.1215/... **Purity for the Brauer group**, *Duke Math. J.*, **168** (2019), no. 8, 1461–1486.
- doi:10.1112/... **The Manin constant in the semistable case**, *Compos. Math.*, **154** (2018), no. 9, 1889–1920.

- doi:10.1017/... **The ℓ -parity conjecture over the constant quadratic extension**, *Math. Proc. Cambridge Philos. Soc.*, **165** (2018), no. 3, 385–409.
- doi:10.2140/... **A modular description of $\mathcal{X}_0(n)$** , *Algebra & Number Theory*, **11** (2017), no. 9, 2001–2089.
- doi:10.14231/... **Coarse base change fails for some modular curves**, *Algebr. Geom.*, **4** (2017), no. 4, 444–451.
- doi:10.1112/... **p -Selmer growth in extensions of degree p** , *J. Lond. Math. Soc.*, **95** (2017), no. 3, 833–852.
- doi:10.1112/... **The remaining cases of the Kramer–Tunnell conjecture**, with Naoki Imai, *Compos. Math.*, **152** (2016), 2255–2268.
- doi:10.1515/... **The p -parity conjecture for elliptic curves with a p -isogeny**, *J. reine angew. Math.*, **719** (2016), 45–73.
- jrms:2016-031... **Selmer groups as flat cohomology groups**, *J. Ramanujan Math. Soc.*, **31** (2016), no. 1, 31–61.
- doi:10.1142/... **Local factors valued in normal domains**, *Int. J. Number Theory*, **12** (2016), no. 1, 249–272.
- doi:10.4310/... **Poitou–Tate without restrictions on the order**, *Math. Res. Lett.*, **22** (2015), no. 6, 1621–1666.
- doi:10.1017/... **Topology on cohomology of local fields**, *Forum Math. Sigma*, **3** (2015), e16, 55 pp.
- doi:10.1112/... **Selmer groups and class groups**, *Compos. Math.*, **151** (2015), no. 3, 416–434.

Students

- 2023 – present **Qixiang Wang**, *PhD student*, Université Paris-Saclay.
- 2021 – 2024 **Shang Li**, *PhD student*, Université Paris-Saclay.
- 2020 – 2023 **Arnab Kundu**, *PhD student*, Université Paris-Saclay.
- 2022 **Yuchen Wu**, *master student*, Université Paris-Saclay.
- 2018 – 2021 **Ning Guo**, *PhD student*, Université Paris-Saclay.
- 2016 **Lukas Melninkas**, *master student*, Université Paris-Sud.

Postdocs

- 2024 – present **Jason Kountouridis**, Université Paris-Saclay.
- 2024 – 2025 **Daniel Kriz**, Université Paris-Saclay.
- 2021 – 2023 **Zhouhang Mao**, Université Paris-Saclay.
- 2022 – 2023 **Siddharth Mathur**, Université Paris-Saclay.
- 2021 **Kazuhiro Ito**, Université Paris-Saclay.
- 2020 – 2022 **Hiroki Kato**, Université Paris-Saclay.
- 2020 – 2021 **Zijian Yao**, Université Paris-Saclay.
- 2020 – 2021 **Yifei Zhao**, Université Paris-Saclay.

Conferences coorganized

- 12/2024 ([website](#)) **Analytic de Rham stacks**, Warsaw, Poland
- 6/2024 ([website](#)) **Algebraic K-theory and Brauer groups**, Casa Matemática Oaxaca, Mexico

- 11/2023 ([website](#)) **Workshop on p -adic Arithmetic Geometry**, IAS, Princeton, USA
- 9/2023 ([website](#)) **Arithmetic and cohomology of algebraic varieties**, Hanoi, Vietnam
- 6/2023 **Théorie des représentations à Lyon**, Institut Camille Jordan, Lyon, France

Selected invited talks

- 8/10/2025 **Algebraic Geometry Seminar**, University of Toronto, Toronto, Canada
- 2/10/2025 ([video](#)) **Arithmetic Geometry and Algebraic Groups**, BIRS, Banff, Canada
- 1–5/9/2025 **Semaine de géométrie algébrique et arithmétique de Iași**, a minicourse, Iași, Romania
- 2/6/2025 **p -adic and Characteristic p Methods in Algebraic Geometry**, Bernoulli Center, Lausanne, Switzerland
- 24/3/2025 **Santiago Number Theory and Algebra Seminar**, Pontificia Universidad Católica de Chile, Chile
- 10–11/2024 **Selected topics in Arithmetic Algebraic Geometry**, a minicourse and a conference talk, Vietnam Academy of Science and Technology, Hanoi, Vietnam
- 4/10/2024 **Séminaire d'arithmétique et de géométrie algébrique**, Université Sorbonne Paris Nord, France
- 13/6/2024 **Algebraic and Arithmetic Geometry Seminar**, Università di Pisa, Pisa, Italy
- 14/3/2024 ([video](#)) **Workshop on p -adic Arithmetic Geometry**, Institute for Advanced Study, Princeton, USA
- 9/2/2024 **Algebraic geometry seminar**, Columbia University, New York City, USA
- 5/12/2023 **Algebraic geometry seminar**, Princeton University, Princeton, USA
- 27/11/2023 **Number theory and representation theory seminar**, University of Maryland, College Park, USA
- 31/10/2023 **Number theory seminar**, MIT, Cambridge, USA
- 24/10/2023 **Algebraic geometry seminar**, NYU Courant, New York, USA
- 21/7/2023 ([video](#)) **IHES Summer School – Recent Advances in Algebraic K-theory**, Institut des Hautes Études Scientifiques, Bures-sur-Yvette, France
- 12/6/2023 **Manin memorial meeting of the London–Paris number theory seminar**, Imperial College London, London, UK
- 18/1/2023 **Number theory seminar**, University of Tokyo, Tokyo, Japan
- 13/1/2023 **Representation theory and geometry of loop spaces**, Orsay, France
- 6/1/2023 **Séminaire Variétés Rationnelles**, Paris, France
- 5/12/2022 **Number theory seminar**, The Hebrew University of Jerusalem, Israel
- 26/9/2022 **Clay Research Conference p -adic Hodge Theory and Applications**, Oxford, UK
- 15/9/2022 **Deutsche Mathematiker-Vereinigung Annual Meeting**, Berlin, Germany
- 20–24/6/2022 **Minicourse at the Algebraic Geometry and Singularities Learning Workshop & Conference**, Seattle, USA
- 9/6/2022 **Topology and Arithmetic around the Langlands Program**, Stockholm, Sweden

- 9/5/2022 **Simons symposium: p -adic Hodge theory**, The Gleneagles Hotel, UK
- 4/5/2022 **p -adic Hodge theory and stacks**, Ann Arbor, USA
- 30/3/2022 **Cohomology of varieties**, Warsaw, Poland
- 15–17/3/2022 **Lectures for the strategic partnership project between the University of Tokyo and Paris Grandes Écoles**, online
- 1/3/2022 **Workshop in Arithmetic Geometry**, Rome, Italy
- 15/11/2021 **Seminario Matematico e Fisico di Milano**, Milan, Italy
- 5/11/2021 **Skorobogatov 60 – Conférence à l'honneur d'Alexei N. Skorobogatov**, Institut Henri Poincaré, Paris, France
- 27/10/2021 ([video](#)) **2021 Fields Medal Symposium: Peter Scholze**, online
- 9/9/2021 ([video](#)) **Arithmetic Geometry – Takeshi 60 (a conference on the occasion of Takeshi Saito's 60th birthday)**, online
- 8/6/2021 ([video](#)) **Arithmetic Geometry in honor of Luc Illusie**, Institut des Hautes Études Scientifiques, Bures-sur-Yvette, France
- 17/4/2021 ([notes](#)) **Séminaire Bourbaki**, Paris, France
- 21/7/2020 ([notes](#)) **Arithmetic Geometry**, Oberwolfach, Germany
- 30/1/2020 **North German Algebraic Geometry Seminar**, Leibniz Universität Hannover, Hannover, Germany
- 7/1/2020 **International Colloquium on Arithmetic Geometry**, Tata Institute of Fundamental Research, Mumbai, India
- 25/12/2019 **Algebra seminar**, Vietnam Academy of Science and Technology, Hanoi, Vietnam
- 6/11/2019 **Number theory seminar**, Harvard University, Cambridge, USA
- 19/9/2019 ([video](#)) **p -adic automorphic forms and perfectoid spaces**, International Center for Theoretical Sciences, Bangalore, India
- 12/7/2019 **Perfectoids**, Centre de Mathématiques Henri Lebesgue, Rennes, France
- 5/7/2019 ([video](#)) **Journée Gretchen & Barry Mazur**, Institut des Hautes Études Scientifiques, Bures-sur-Yvette, France
- 27/6/2019 ([video](#)) **Rational points on irrational varieties**, Institut Henri Poincaré, Paris, France
- 15/5/2019 **Algebraic geometry colloquium**, MSRI, Berkeley, USA
- 2/5/2019 **Simons symposium: p -adic Hodge theory**, Schloss Elmau, Germany
- 8/4/2019 **Joint IAS/Princeton University algebraic geometry seminar**, Institute for Advanced Study, Princeton, USA
- 2/4/2019 **Derived algebraic geometry seminar**, MSRI, Berkeley, USA
- 15/3/2019 **Intercity number theory seminar**, Universiteit Utrecht, Netherlands
- 12/3/2019 **Commutative algebra seminar**, Simion Stoilow Institute of Mathematics of the Romanian Academy, Bucharest, Romania
- 27/2/2019 **Algebra and geometry seminar**, KTH Royal Institute of Technology, Stockholm, Sweden
- 13/2/2019 **Number theory seminar**, University of British Columbia, Vancouver, Canada
- 5/11/2018 **Oberseminar: Algebraische Geometrie**, Universität Zürich, Switzerland
- 20/9/2018 **Belgian-Dutch algebraic geometry seminar**, Nijmegen, Netherlands
- 11/9/2018 **Arithmetic Geometry: ℓ -adic and p -adic aspects**, Tokyo, Japan

- 16/7/2018 **Algebraic geometry seminar**, BICMR, Beijing, China
- 27/6/2018 **London Number Theory Seminar**, London, UK
- 22/6/2018 **Séminaire Variétés Rationnelles**, Paris, France
- 22/5/2018 **Gropes algébriques et Géométrisation du Programme de Langlands**, Lyon, France
- 6/4/2018 ([notes](#)) **Arbeitsgemeinschaft Topological Cyclic Homology**, Oberwolfach, Germany
- 13/3/2018 ([video](#)) **Hot Topics: The Homological Conjectures**, MSRI, Berkeley, USA
- 30/1/2018 **Number theory seminar**, University of Cambridge, Cambridge, UK
- 25/8/2017 **Algebraic K-theory and arithmetic**, Będlewo, Poland
- 24/5/2017 **University of Tokyo workshop on arithmetic geometry**, Tambara, Japan
- 16/5/2017 **Number theory seminar**, University of Chicago, Chicago, USA
- 20/4/2017 **Quebec–Vermont number theory seminar**, Montreal, Canada
- 27/3/2017 **Elliptic Curves, Torsors, and L-functions**, Charlottesville, USA
- 20/2/2017 **Kyoto Top Global University Mathematics Workshop**, Kyoto, Japan
- 17/2/2017 **RTG Lectures in Arithmetic Geometry at Rice**, Houston, USA
- 9/4/2016 **Bay Area Algebraic Number Theory and Algebraic Geometry Day**, Berkeley, USA
- 5/3/2016 **Special Session on Elliptic Curves**, AMS Sectional Meeting, Athens, USA
- 4/7/2015 **Rational Points 2015**, Franken-Akademie Schloss Schney, Schney, Germany
- 16/6/2015 **Morningside Seminar on Number Theory**, Morningside Center of Mathematics, Chinese Academy of Sciences, Beijing, China
- 12/1/2015 **Special Session on Selmer Groups**, AMS Joint Mathematics Meetings, San Antonio, USA
- 12–14/11/2014 **Invited lecture series**, Kaunas University of Technology, Kaunas, Lithuania
- 4/5/2014 **Atkin memorial workshop**, University of Illinois at Chicago, Chicago, USA
- 25/7/2013 **Rational Points 2013**, Schloss Thurnau, Germany
- 19/7/2013 **Explicit Methods in Number Theory**, Oberwolfach, Germany
- 5/12/2012 **Heilbronn seminar**, University of Bristol, Bristol, United Kingdom

Committee service

- 7/2025 **Thesis committee (referee) for Yicheng Zhou**, Sorbonne Université.
- 10/2023 **Habilitation referee for Johannes Anschütz**, Universität Bonn.
- 3/2023 **Thesis committee (referee) for Guido Bosco**, Sorbonne Université.
- 1/2022 – present **Member of the CCUPS committee**, Université Paris-Saclay.
- 12/2021 **Thesis committee (referee) for Simon Jacques**, Université de Lorraine.
- 10/2021 **Thesis committee (referee) for Zhouhang Mao**, Sorbonne Université.
- 7/2021 **Thesis committee (referee) for Lukas Melninkas**, Université de Strasbourg.
- 6/2021 **Thesis committee for Amadou Bah**, Institut des Hautes Études Scientifiques.
- 5/2021 **Hiring committee for Maître de conférences**, Université Paris-Saclay.
- 10/2020 **Thesis committee for Min Yu**, Sorbonne Université.
- 9/2020 **Thesis committee for Sally Giles**, École normale supérieure de Lyon.

- 10/2019 – 6/2022 **Coorganizer of the SAGA seminar**, Université Paris-Saclay.
8/2015 **Thesis committee (referee) for Adam Morgan**, University of Bristol.

Teaching

- Spring 2023 **Immersion into research projects**, Université Paris-Saclay
Supervised four groups of students to write omitted proofs in the Stacks Project
- Spring 2017 **Integral relations between p-adic cohomology theories**
UC Berkeley number theory learning seminar ([plan](#))
- Spring 2013 **18.03 - Differential Equations**, recitation leader, MIT
- Fall 2011 **18.06 - Linear Algebra**, recitation leader, MIT

Other professional experiences

- 3/2015 **Problem session leader at the Arizona Winter School 2015**, [notes](#).
- 6/2011 – 7/2011 **Mentor for the Research Science Institute**, MIT, Cambridge, USA.
Designed and supervised two mathematics research projects for high-school students
- 2008 – 2011 **Lecturer at the IMO training camps**, Lithuania.
- 7/2008 **Author of the problem No. 3**, IMO 2008, Spain.