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Academic positions

- 12/2017 – present **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

- 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 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

- [Project Overview](#) **European Research Council Starting Grant**, 2019
- 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

Research articles

- arXiv:2009.05299 **Grothendieck–Serre in the quasi-split unramified case**, *submitted*.
- arXiv:1912.10932 **Purity for flat cohomology**, with Peter Scholze, *submitted*.
- arXiv:1911.09446 **The Manin constant and the modular degree**, with Michael Neururer and Abhishek Saha, *submitted*.
- arXiv:1908.07480 **Torsors on loop groups and the Hitchin fibration**, with Alexis Bouthier, *Ann. Sci. Éc. Norm. Supér.*, to appear.
- 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.

PhD students

- 2021 – present **Shang Li**, Université Paris-Saclay.
- 2020 – present **Arnab Kundu**, Université Paris-Saclay.
- 2018 – 2021 **Ning Guo**, Université Paris-Saclay.

Postdocs

- 2021 – present **Kazuhiro Ito**, Université Paris-Saclay.
- 2020 – present **Zijian Yao**, Université Paris-Saclay.
- 2020 – present **Yifei Zhao**, Université Paris-Saclay.
- 2020 – present **Hiroki Kato**, Université Paris-Saclay.

Selected invited talks

- 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
 - 7/2/2020 **Séminaire de Théorie des Nombres**, Institut de Mathématiques de Bordeaux, Bordeaux, France
 - 30/1/2020 **North German Algebraic Geometry Seminar**, Leibniz Universität Hannover, Hannover, Germany
- 7/1/2020 ([video](#)) **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
- 8/11/2019 **Automorphic forms and arithmetic**, Columbia University, New York, USA
- 6/11/2019 **Number theory seminar**, Harvard University, Cambridge, USA
- 11/10/2019 **Séminaire de Géométrie Arithmétique et Motivic**, Paris 13, France
- 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
- 2/7/2019 **Seminar of the Algebra Group**, Technische Universität Darmstadt, Darmstadt, Germany
- 27/6/2019 ([video](#)) **Rational points on irrational varieties**, Institut Henri Poincaré, Paris, France
- 14/6/2019 **Seminar der Forschergruppe ‘Symmetrie, Geometrie und Arithmetik’**, Heidelberg, Germany
- 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
- 31/1/2019 **Séminaire Arithmétique et géométrie algébrique**, Université de Strasbourg, France
- 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
- 20/6/2018 **Séminaire Autour des cycles algébriques**, 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
- 11/12/2017 **Séminaire de théorie des nombres de l'IMJ-PRG**, Paris 7, France
- 30/11/2017 **Oberseminar für Algebraische Geometrie und Arithmetik**, Universität Duisburg-Essen, Essen, Germany
- 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
- 23/4/2017 **Conference in Celebration of the 90th Anniversary of the Establishment of Mathematical Disciplines at Tsinghua University**, Beijing, China
- 20/4/2017 **Quebec–Vermont number theory seminar**, Montreal, Canada
- 3/4/2017 **Number theory seminar**, UCLA, Los Angeles, USA
- 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
- 11/10/2016 **MIT number theory seminar**, Cambridge, 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
- 19/5/2015 **Number theory seminar**, University of Washington, Seattle, USA
- 31/3/2015 **Séminaire d'arithmétique à Lyon**, Lyon, France
- 5/3/2015 **Number theory seminar**, Caltech, Pasadena, USA

- 11/2/2015 **Number theory and arithmetic geometry seminar**, University of Georgia, Athens, USA
- 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

- 7/2021 **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 – present **Coorganize the SAGA seminar**, Université Paris-Saclay.
- 8/2015 **Thesis committee (referee) for Adam Morgan**, University of Bristol.

Teaching

- 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 **Ran problem sessions 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.