# Qixiao Ma

Email
qxma10@fudan.edu.cn
Website
qxma10.github.io

Mailing Address
Room 315, Shanghai
Center for
Mathematical Sciences,
Fudan University,
2005 Songhu Road,
Shanghai, 200438, China

#### Education

2014.9-2019.6

Ph.D. in Mathematics, Columbia University. Advisor: Aise Johan de Jong

2010.9-2014.6

B.S. in Mathematics, Fudan University.

#### Employment

2019.9-Present

Postdoc, Shanghai Center for Mathematical Sciences. Mentor: Jun Li

#### Research Area

Algebraic geometry and number theory.

# Preprints

Brauer class over the Picard scheme of curves. (Submitted) arXiv:1911.04186
Conics associated with totally degenerate curves. (Submitted) arXiv:1908.03170
Closed points on cubic hypersurfaces. (Submitted) arXiv:1908.03139
Some Properties of a Brauer class. (Submitted) arXiv:1908.03131

#### Research Talks

- 2019.7. Shanghai Center for Mathematical Sciences, Algebraic Geometry Seminar. (Conics associated with totally degenerate curves.)
- 2019.2. Columbia University, Algebraic Geometry Seminar. (Brauer class over the Picard scheme of curves)
- 2018.12. Boston College, Number Theory and Algebraic Geometry Seminar.\*
  (Brauer class over the Picard scheme of curves)
- 2018.10. Rutgers University, Algebra Seminar.\*
  (Brauer class over the Picard scheme of curves)
- 2018.10. Yale University, Algebra and Number Theory Seminar.\*
  (Brauer class over the Picard scheme of curves)
- 2018.9. Rice University, Algebraic Geometry and Number Theory Seminar.\*
  (Brauer class over the Picard scheme of curves)
- 2018.6. Pingree Park, The 13th Brauer Group Conference. (Brauer class over the Picard scheme of curves)

(\* for invited talks)

## Conferences

- 2019.12. Algebraic Geometry and Arithmetic Geometry, University of Sciences and Technology of China.
- 2019.8. Workshop on Algebraic Geometry, Fudan University.
- 2019.5. Hot Topics: Recent progress in Langlands Program, MSRI.
- 2019.3. Arizona Winter School: Topology and Arithmetic, Tucson.

- 2018.9. Workshop on moduli space and related problems, Shanghai Center of Mathematical Sciences.
- 2018.7. Witt Vectors, Deformations, and Absolute Geometry, University of Vermont.
- 2018.6. Pingree Park, The 13th Brauer Group Conference.
- 2018.4. Algebraic Geometry Northeastern Series, Rutgers University.
- 2017.3. Arizona Winter School: Perfectoid Spaces, Arizona State University.
- 2015.10. Algebraic Geometry Northeastern Series, Brown University.
- 2015.5. Perspectives on Complex Algebraic Geometry, Columbia University.
- 2014.11. Algebraic Geometry Northeastern Series, University of Pennsylvania.

# <u>Visits</u>

2020.2-3. IHES invited researcher.

### Teaching

- 2018 Summer. Linear Algebra.
- 2017 Summer. Analysis and Optimization.
- 2016 Summer. Calculus I.

# Teaching Assistant

- 2019 Spring. Abstract Algebra.
- 2018 Fall. Linear Algebra.
- 2018 Spring. Linear Algebra.
- 2018 Spring. Undergraduate Seminar.
- 2017 Fall. Undergraduate Seminar.
- 2017 Summer. Calculus III.
- 2017 Spring. Undergraduate Seminar.
- 2016 Fall. Calculus I
- 2016 Summer. Calculus I
- 2016 Spring. Linear Algebra.

#### Graduate Student Seminars

- 2019 Spring. Seminar Semi-stable Higgs Bundles.
  - Talk: Mar 17, Boundedness.
- 2018 Fall. <u>Seminar</u> on Topologies and descent.
- 2018 Summer. Seminar on Integral p-adic Hodge Theory.
  - Talk: Jul 5, Global results.
  - Talk: May 31,  $L\eta$  functor
- 2018 Spring. Seminar on Crystalline Cohomology.
- 2017 Fall. Seminar on Geometry of Fundamental Lemma.
  - Talk: Sep 20, Statement of Jacquet-Rallis fundamental lemma.
- 2017 Fall. <u>Seminar</u> on Moduli of Sheaves.
  - Talk: Dec 5, Bondal-Orlov Reconstruction.
- 2017 Fall. <u>Seminar</u> on Examples in Algebraic Geometry.
  - Talk: Sep 15, Del Pezzo surfaces with irregularity.
- 2017 Summer. Seminar on Classical Papers in algebraic geometry.
  - Talk: Aug 8, Il n'y a pas de variété sur  $\mathbb{Z}$ .
- 2017 Spring. <u>Seminar</u> on Langlands Program.
  - Talk: Feb 1, Galois representations and L-functions.
- 2017 Spring. <u>Seminar</u> on Beilinson-Bernstein-Deligne.
  - Talk: Jan 24, Six functors, Verdier duality.
- 2017 Spring. Seminar on Mordell Conjecture.
  - Talk: Feb 23, Theory of heights.
  - Talk: Mar 30, Behavior of Faltings height under isogeny.
- 2016 Fall. <u>Seminar</u> on Bjorn Poonen's work.

	Talk: Nov 11, The Cassels-Tate pairing on polarized abelian varieties.
2016 Fall.	<u>Seminar</u> on Deligne-Illusie.
	Talk: Oct 25, Review of étale cohomology.
	Talk: Nov 1, Introduction to Weil II, reductions
2016 Spring.	<u>Seminar</u> on FGA-explained.
	Talk: Feb 23, Existence of Hilbert and Quot schemes.
	Talk: Apr 19, Existence of Picard schemes.
2016 Spring.	<u>Seminar</u> on Stable Rationality.
	Talk: Feb 19, Artin-Mumford invariant.
2015 Fall.	Seminar on Tate Conjecture for Surfaces.
2015 Fall.	<u>Seminar</u> on Etale Cohomology.
	Talk: Nov.17, Poincaré duality.
	Talk: Nov.24, Lefschetz trace formula (Nielsen-Wecken).
2015 Spring.	<u>Seminar</u> on Hodge theory.
	Talk: Feb.23, Laplacians.
2015 Spring.	<u>Seminar</u> on Intersection Theory.
	Talk: Jan 30, Cycles, rational equivalences.
2014 Fall.	<u>Seminar</u> on Tropical Geometry.
	Talk: Oct 3, Baker's specialization lemma.