

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

Invited 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)

Conferences

2018.12. 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.

### Visits

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. Seminar 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. Seminar on Moduli of Sheaves.  
     Talk: Dec 5, Bondal-Orlov Reconstruction.  
 2017 Fall. Seminar 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. Seminar on Langlands Program.  
     Talk: Feb 1, Galois representations and  $L$ -functions.  
 2017 Spring. Seminar 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. Seminar on Bjorn Poonen's work.  
     Talk: Nov 11, The Cassels-Tate pairing on polarized abelian varieties.  
 2016 Fall. Seminar on Deligne-Illusie.

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