

Masahiro Nakahara

CONTACT INFORMATION Rice University (727)686-2721
Department of Mathematics mn24@rice.edu
6100 Main St
Houston, TX 77005 USA

RESEARCH INTERESTS Algebraic Geometry, Number Theory, Rational Points

EDUCATION **Rice University**
Ph.D. Candidate, Mathematics (expected May 2017)

- Advisor: Anthony Várilly-Alvarado

M.S. in Mathematics, December 2014

University of Florida
B.S. in Mathematics, May 2012

- Double major in statistics
- Minor in actuarial science

EMPLOYMENT **Essilor of USA**, St. Petersburg, FL
Lab Assistant, May-August 2010

EXPOSITORY TALKS *Hardy-Littlewood circle method*, Current Mathematics Seminar, Rice University. (April 6, 2017)

Odd torsion Brauer-Manin obstruction on degree 2 K3 surface, Algebraic Geometry and Number Theory Seminar, Rice University. (February 28, 2017)

Modular forms, Algebraic Geometry Working Seminar, Rice University. (January 30, 2017)

Cohomology of curves, Etale Cohomology Seminar, Rice University. (March 18, 2016)

Undecidability in number theory, Current Mathematics Seminar, Rice University. (February 18, 2016)

Direct and inverse image of sheaves, Etale Cohomology Seminar, Rice University. (February 12, 2016)

Jacobian of a curve, Modular Forms Seminar, Rice University. (November 20, 2015)

Connected solvable groups, Algebraic Geometry Working Seminar, Rice University. (November 12, 2015)

Elementary unipotent groups, Algebraic Geometry Working Seminar, Rice University. (October 8, 2015)

Rational points over function fields, Algebraic Geometry Working Seminar, Rice University. (April 23, 2015)

Examples of rational surfaces, linear systems of conics, Algebraic Geometry Working Seminar, Rice University. (February 19, 2015)

Rational points, Current Mathematics Seminar, Rice University. (February 5, 2014)

Dynkin diagrams, Algebraic Geometry Working Seminar, Rice University. (November 21, 2014)

Descent theory, Elliptic Curves Seminar, Rice University. (November 18, 2014)

Introduction to group cohomology, Elliptic Curves Seminar, Rice University. (November 11, 2014)

Representations of $\mathfrak{sl}_2\mathbb{C}$, Algebraic Geometry Working Seminar, Rice University. (September 26, 2014)

Weil conjectures, Current Mathematics Seminar, Rice University. (April 17, 2014)

Intersection theory, Algebraic Geometry Working Seminar, Rice University. (February 17, 2014)

Étale fundamental group, Algebraic Geometry Working Seminar, Rice University. (November 1, 2013)

Pattern packaging, Current Mathematics Seminar, Rice University. (March 14, 2013)

CONFERENCES
ATTENDED

Emory Conference on Higher Obstructions to Rational Points, Emory University, Atlanta GA. (May 15-19, 2017)

Texas Algebraic Geometry Symposium, Rice University, Houston TX. (April 21-23, 2017)

Arizona Winter School: Perforoid Spaces, University of Arizona, Tucson AZ. (March 11-15, 2017)

RTG Lectures in Arithmetic Geometry at Rice, Rice University, Houston TX. (February 17-19, 2017)

Texas Algebraic Geometry Symposium, University of Texas at Austin, Austin TX. (April 2-3, 2016)

Texas Algebraic Geometry Seminar 2015 Fall Workshop, Texas A&M University, College Station TX. (October 24, 2015)

LMS-CMI Summer School on Diophantine Equations, Baskerville Hall, Hay-on-Wye, Wales. (September 15-19, 2015)

AMS Summer Institute in Algebraic Geometry, University of Utah, Salt Lake City UT. (July 27-31, 2015)

GAeL XXIII, Leuven Belgium. (June 1-5, 2015)

Arizona Winter School: Arithmetic and Higher-Dimensional Varieties, University of Arizona, Tucson AZ. (March 14-18, 2015)

Counting Arithmetic Objects, Université de Montréal, Montréal, Canada. (June 23-July 4, 2014)

Texas Algebraic Geometry Symposium, Rice University, Houston TX. (April 4-6, 2014)

Arizona Winter School: Arithmetic Statistics, University of Arizona, Tucson AZ. (March 15-19, 2014)

TEACHING
EXPERIENCE

Rice University

Fall	2014	Instructor, Calculus I
Spring	2014	Teaching Assistant, Calculus II
Fall	2013	Teaching Assistant, Calculus I
Spring	2013	Teaching Assistant, Differential Equations
Fall	2012	Teaching Assistant, Calculus II

LANGUAGES

English, Japanese, Chinese