

Masahiro Nakahara

CONTACT INFORMATION	University of Washington Padelford Hall Seattle WA 98195, USA https://sites.math.washington.edu/~mn75/index.html	mn75@uw.edu
RESEARCH INTERESTS	Arithmetic geometry, number theory, rational points	
EMPLOYMENT	University of Washington Postdoctoral Scholar - supervised by Bianca Viray	September 2020-Present
	University of Bath Research Associate - supervised by Daniel Loughran	April 2019-June 2020
	University of Manchester Research Associate - supervised by Daniel Loughran	July 2018-March 2019
EDUCATION	Rice University Ph.D. in Mathematics Advisor: Anthony Várilly-Alvarado	May 2018
	University of Florida B.S. in Mathematics and Statistics	May 2012
PUBLICATIONS	Uniform potential density for rational points on algebraic groups and elliptic K3 surfaces (w/ Kuan-Wen Lai) <i>International Mathematics Research Notices</i> , to appear arXiv:2010.00563 .	
	Quantitative arithmetic of diagonal degree 2 K3 surfaces (w/ D. Gvirtz, D. Loughran) <i>Mathematische Annalen</i> , to appear arXiv:1910.06257 .	
	Rational points on conic bundles over elliptic curves. (w/ J. Berg) <i>Mathematische Zeitschrift</i> , to appear arXiv:1906.09646 .	
	Index of fibrations and Brauer classes that never obstruct the Hasse principle. <i>Advances in Mathematics</i> , 348 (2019), 512-522.	
	Brauer–Manin obstructions on degree 2 K3 surfaces. (w/ P. Corn) <i>Research in Number Theory</i> 4 (2018), no. 3, Art. 33, 16 pp.	
PREPRINTS	The elliptic sieve and Brauer groups (w/ Subham Bhakta, Dan Loughran, Simon L. Rydin Myerson) <i>submitted for publication</i> arXiv:2109.03746 .	
	Weak approximation and the Hilbert property for Campana points (w/ Sam Streeter) <i>submitted for publication</i> arXiv:2010.12555 .	
	Biregular Cremona transformations of the plane (w/ S. Asgarli, K.-W. Lai, S. Zimmermann) <i>submitted for publication</i> arXiv:1910.05302 .	

AWARDS AMS–Simons Travel Grant 2021

INVITED TALKS Goettingen-Hannover Number Theory Seminar. (June 2021)

 Institut Mittag-Leffler, Number Theory Mini Conference. (April 2021)

 University of Washington, Number Theory Seminar. (October 2020)

 University of Washington, Colloquium. (October 2020)

 University of Massachusetts at Amherst, Algebraic Geometry Seminar. (December 2019)

 University of Bath, AGENT Seminar. (November 2019)

 Rice University, Algebraic Geometry and Number Theory Seminar. (March 2019)

 University of Sheffield, Number Theory Seminar. (February 2019)

 Young Researchers in Algebraic Number Theory. (November 2018)

 University of Manchester, Number Theory Seminar. (October 2018)

 K3 surfaces and Galois representations. (May 2018)

 University of Wisconsin-Madison, Number Theory Seminar. (November 2017)

 Brown University, Algebra Seminar. (October 2017)

 Rice University, Algebraic Geometry and Number Theory Seminar. (February 2017)

TEACHING
EXPERIENCE

University of Washington

Fall	2021	Instructor, MATH224 Advanced Multivariable Calculus
Summer	2021	Instructor, MATH340 Abstract Linear Algebra
Spring	2021	Instructor, MATH308 Matrix Algebra
Winter	2020	Instructor, MATH308 Matrix Algebra

Rice University

Fall	2017	Teaching Assistant, MATH365 Number Theory
Spring	2017	Teaching Assistant, MATH356 Abstract Algebra I
Fall	2016	Teaching Assistant, MATH463 Abstract Algebra II
Spring	2016	Teaching Assistant, MATH464 Abstract Algebra III
Fall	2015	Teaching Assistant, MATH371 Lie Theory
Spring	2015	Teaching Assistant, MATH212 Calculus III
Fall	2014	Instructor, MATH101 Calculus I
Spring	2014	Teaching Assistant, MATH102 Calculus II
Fall	2013	Teaching Assistant, MATH101 Calculus I
Spring	2013	Teaching Assistant, MATH211 Differential Equations
Fall	2012	Teaching Assistant, MATH101 Calculus II

REFERENCES

Research:

Daniel Loughran, University of Bath, dt132@bath.ac.uk

Alexei Skorobogatov, Imperial College London, a.skorobogatov@imperial.ac.uk

Anthony Várilly-Alvarado, Rice University, av15@rice.edu

Bianca Viray, University of Washington, bviray@uw.edu

Teaching:

Michael Wolf, Rice University, mwolf@rice.edu