Tobias Shin

CONTACT
INFORMATION

Phone: +1 408 318 1228   *E-mail:* tobias.shin@stonybrook.edu
Website: https://www.math.stonybrook.edu/˜tshin/

RESEARCH
INTERESTS

Algebraic topology and its applications to algebraic geometry, differential geometry

EDUCATION

Stony Brook University, Stony Brook, NY

Ph.D. student, Mathematics, August 2016 – present
  - Advisor: Dennis Sullivan

New York University, New York, NY

B.A., Mathematics, 2012–2016

PUBLICATIONS

– Fernandez, L., Shin, T., Wilson, S., 2021. Almost complex manifolds with small Nijenhuis tensor. To appear in *Complex Manifolds*, `arXiv:2103.06090`

– Shin, T., 2021. Directed immersions for complex structures. *Comptes Rendus Mathématique*, 359(7), pp. 773-793. `link`

PREPRINTS

– Shin, T., 2021. Prismatic cohomology and p-adic homotopy theory, `arXiv:2107.02256`

– del Pino, Á. and Shin, T., 2020. Microflexibility and local integrability of horizontal curves, `arXiv:2009.14518`

AWARDS AND
STIPENDS

- Research Training Group in Geometry (RTG) Fellowship, 2018-2020
- GAANN Fellowship, 2016-2017
- College of Arts and Science Scholarship, 2015
- Dean's Undergraduate Research Fund (DURF) Grant, 2014–2015
- Summer Undergraduate Research Experience (SURE), 2014
- Gopal Varadhan Scholarship, 2013

INVITED
TALKS

Seminar on Topics in Arithmetic, Geometry, Etc. (STAGE) at Massachusetts Institute of Technology, March 2021

Dennis Sullivan's Stony Brook seminar, December 2019

Almost Complex Geometry Seminar at City University of New York Graduate Center, March 2019

Student Algebraic Geometry Seminar at Stony Brook, November 2018, April 2019, October 2020

Mapping Class Group Seminar at Stony Brook, September 2018, February 2019

RTG Seminar at Stony Brook, September 2018

Low-dimensional Topology Seminar at Stony Brook, February 2018

Stony Brook Graduate Student Seminar at Stony Brook, November 2017, September 2018, October 2020

Rational Homotopy Theory Seminar, September 2017

Analysis Student Seminar at Stony Brook, September 2016

SURE Presentation at Courant Institute, October 2014

WORKSHOPS AND
CONFERENCES

Analysis, Dynamics, Geometry and Probability, Simons Center for Geometry and Physics, March 2020

Graduate school on Geometry of Teichmuller spaces, Simons Center for Geometry and Physics, April 2019

James Simons' 80th birthday conference – Fluids in dim ≤ 3 and complex manifolds in dim ≥ 3, CUNY Graduate Center, April 2018

Benson Farb's 50th birthday conference – No Boundaries: Groups in Algebra, Geometry, and Topology, University of Chicago, October 2017

Chicago Summer School in Geometry and Topology, July 2016, University of Chicago

Chicago Summer School in Analysis, July 2015, June 2016, University of Chicago

TEACHING
EXPERIENCE

Teaching Assistant, Stony Brook University

- *Introduction to Mathematical Thinking*, Spring 2017

- *Overview of Calculus with Applications*, Fall 2020

- *Precalculus*, Fall 2021

- *Calculus A*, Fall 2016

- *Calculus B*, Fall 2017, Spring 2018

- *Calculus II*, Fall 2019

- *Foundations of Real Analysis*, Fall 2020

OUTREACH,
SERVICE, AND
OTHER
EXPERIENCE

Mentored the junior Gabrielle Vaillant as part of the Directed Reading Program on knot theory at Stony Brook University

David Kahn and Scott Sutherland's *Summer Math Camp program at Stony Brook* for high-school students, July 2018, July 2019, July 2020, July 2021

New York University Math Society, *Treasurer*, September 2014–May 2016

Tutor employed at *Thinking Caps Group* for high-school students on geometry and physics for the New York regents exams, March 2014–May 2015

Teacher's assistant and tutor employed under *America Reads* in New York public school system, third and fifth grade students, September 2012–May 2014