

Xuntao Hu

CONTACT INFORMATION	Mathematics Department Stony Brook University 100 Nicolls Rd, Stony Brook, New York, USA	xuntao.hu@stonybrook.edu http://www.math.sunysb.edu/~xuntaohu
RESEARCH INTERESTS	Teichmüller theory, Algebraic geometry, Dynamical Systems. More specifically: Compactifications of Moduli spaces of curves / p.p.a.v / abelian differentials; Siegel modular forms and theta functions, Dynamic properties of the Teichmüller geodesic flow and its generalizations.	
EDUCATION	Mathematics Department, Stony Brook University, NY Ph.D. Candidate, Mathematics (expected May 2019) <ul style="list-style-type: none">• Dissertation Title: (prospective) Degenerations in Teichmüller Theory.• Advisor: Samuel Grushevsky Zhejiang University, Hangzhou, China B.A. in Mathematics, June 2012 <ul style="list-style-type: none">• Dissertation Title: Compact Complex Surfaces: Ruled Surfaces.• Advisor: Fangyang Zheng (Ohio State University)• Minor in English Literature	
PUBLICATIONS	X. Hu and C. Norton, <i>General Variational Formulas for Abelian Differentials</i> , 40 pages, Preprint, arXiv:1706.05366, 2017, Accepted by International Mathematics Research Notices. DOI:10.1093/imrn/rny106 X. Hu, <i>Locus of Plane Quartics with A Hyperflex</i> , 15 pages, Proc. Amer. Math. Soc. 145 (2017), 1399-1413.	
ONGOING PROJECTS	<input type="checkbox"/> Degeneration of Goldman's symplectic pairing on character varieties. <input type="checkbox"/> Local behavior of the period coordinates near the boundary of the moduli space of abelian differentials.	
TALKS	Graduate Student Conference in Algebra, Geometry, and Topology, Temple University, Philadelphia, PA, <i>Jun 2018</i> . Graduate Student Topology and Geometry Conference, University of Illinois, Chicago, <i>Apr 2018</i> . Algebraic Geometry Seminar, Stony Brook University, NY, <i>Jan 2018</i> . RIT seminar, University of Maryland, College Park, MD, <i>Sep 2017</i> . Algebraic Geometry Seminar, Leibniz University, Hannover, Germany, <i>Sep 2015</i> . Algebraic Geometry Seminar, Zhejiang University, Hangzhou, China, <i>Dec 2014</i> .	
OTHER PRESENTATIONS	Poster. Algebraic Geometry Northeastern Series, Northeastern University, Boston, MA, <i>Oct 2017</i> .	

Poster. Cycles on Moduli Spaces, GIT, and Dynamics, ICERM, Brown University, Providence, RI, *Aug 2016*.

EXTENDED VISITS	Fall 2015	Leibniz University, Hannover, Germany	
	Fall 2015	Humboldt University, Berlin, Germany	
TEACHING EXPERIENCE	Lecturer	Summer 2018	Calculus C (Differential Equations, Series, Sequences);
		Summer 2017	Lecturer, Calculus B (Integrations);
		Summer 2015	Lecturer, Calculus B (Integrations);
	TA (Recitation)	Spring 2018	Multivariable Calculus;
		Spring 2017	Multivariable Calculus;
		Fall 16 - Spring 13	Various single-variable Calculus courses;
	Grader	Spring 2018	Complex Analysis (graduate level);
		Fall 2017	Geometry for Teachers; Probability for Teachers;
		Spring 2017	Complex Analysis (graduate level).
SERVICES	Since 2017	Reviewer for Zentralblatt MATH	
RELEVANT SKILLS	Languages:	English, Chinese	
	Programming:	Java, Python, Maple	
REFERENCES	Samuel Grushevsky , Stony Brook University, sam@math.stonybrook.edu Robert Lazarsfeld , Stony Brook University, robert.lazarsfeld@stonybrook.edu Enrico Arbarello , Universita Roma La Sapienza, ea@mat.uniroma1.it Scott Wolpert , University of Maryland, swolpert@math.umd.edu Julia Viro , Stony Brook University, julia.viro@gmail.com (teaching)		