

WEIHONG XU

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RESEARCH INTERESTS

Algebraic geometry and combinatorics.

EMPLOYMENT

Postdoctoral Associate, Virginia Tech, Mentor: Leonardo Mihalcea

Oct 2022 –

EDUCATION

Ph.D. Mathematics, Rutgers University, Advisor: Anders Buch

Sept 2017 – Oct 2022

M.S. Mathematics, Courant Institute

Sept 2014 – May 2016

B.S. Theoretical and Applied Mechanics, Peking University

Sept 2010 – July 2014

PUBLICATIONS AND PREPRINTS

1. The isomorphism problem for cominuscle Schubert varieties (with E. Richmond and M. T̃arigradschi), *in preparation*.
2. The isomorphism problem for Grassmannian Schubert varieties (with M. T̃arigradschi), *submitted*, arXiv: 2205.12814.
3. Quantum K -theory of Incidence Varieties, *submitted*, arXiv: 2112.13036.
4. On an equivalence of divisors on $\overline{M}_{0,n}$ from Gromov-Witten theory and conformal blocks (with L. Chen et al.), *Transformation Groups* (2022), arXiv: 2107.00174.

CONFERENCE AND SEMINAR TALKS

Geometric Representation Theory and Quantum Topology workshop, Paris Cité University

Dec 2022

University of British Columbia Algebraic Geometry Seminar

Nov 2022

MIT-Harvard-MSR Combinatorics Seminar, MIT

Oct 2022

AMS Special Session on Combinatorial Algebraic Geometry

Oct 2022

Virginia Tech Algebra Seminar

Sept 2022

Algebraic Geometry Northeastern Series, Rutgers University (*poster*)

May 2022

Schubert Seminar

Mar 2022

Versailles Saint-Quentin-en-Yvelines University Seminars AG

Feb 2022

Rutgers University Algebra Seminar

Jan 2022

ICERM Geometry and Combinatorics from Root Systems workshop

Mar 2021

ICERM Sage/Oscar Days for Combinatorial Algebraic Geometry workshop

Feb 2021

American Graduate Student Algebraic Geometry Seminar (AGSAGS)

Dec 2020

TEACHING

ICERM, Teaching Assistant

Combinatorial Algebraic Geometry Introductory Workshop (*online*)

Feb 2021

Rutgers University, Instructor

Introductory Linear Algebra (<i>online</i>)	Summer 2020
Rutgers University , Teaching Assistant	
Special Pre-enrollment Program for New Graduate Students (<i>online</i>)	Aug 2020
Differential Equations for Engineering and Physics	Spring 2020
Calculus I Math/Physics (Honors)	Fall 2019
Graduate Algebra I	Fall 2018
Johns Hopkins Center for Talented Youth , Teaching Assistant	
Inductive and Deductive Reasoning (<i>for 5th and 6th graders</i>)	Summer 2017
New York University , Recitation Leader	
Great Ideas in Math	Fall 2015
SERVICE AND MENTORING	
Math Department Liaison, Rutgers Overseas Semester Program	Aug 2020 – Dec 2021
Co-organizer, Graduate Student and Postdoc Seminar,	
ICERM Combinatorial Algebraic Geometry Semester Program	Spring 2021
Discussion Leader, International Teaching Assistant Orientation, Rutgers University	Aug 2019
Graduate Mentor, undergraduate research on Schubert calculus (REU), Rutgers University	Summer 2018
HONORS AND AWARDS	
Rutgers University School of Arts and Sciences Graduate Fellowship	Spring 2021
Rutgers University Janice Pattwell Annual Mathematics Fellowship	2020
Rutgers University TA/GA Professional Development Fund	2018
OTHER TALKS	
Rutgers University	
Graduate Algebra and Representation Theory Seminar (<i>2 talks</i>)	2018, 2021
Algebraic Geometry Learning Seminar	2019
Research Glimpse for Incoming Graduate Students	2018
Graduate Combinatorics Seminar	2018
Undergraduate Math Seminar	2018
Temple University	
Annual Graduate Student Conference in Algebra, Geometry, and Topology	2018
Courant Institute	
CSplash (<i>annual lecture series for high school students</i>)	2016