

Richard Wong

PH.D. CANDIDATE, MATHEMATICS (HE/HIM/HIS)

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Education

University of Texas at Austin

PH.D. CANDIDATE IN MATHEMATICS

- Concentration in Teaching and Mentoring, expected 2020
- Concentration in Communicating Science, 2019
- Teaching Preparation Certificate, 2018
- Inclusive Classrooms Leadership Certificate, 2017

Austin, Texas

Expected May 2021

Rutgers University

B.S. SUMMA CUM LAUDE IN MATHEMATICS (HONORS TRACK), *highest honors*

- SAS Honors Program
- Matthew Leydt Society, Class of 2015

New Brunswick, New Jersey

May 2015

Publications

[1] Endo-trivial Modules via Galois Descent

Jeroen Meer, Richard Wong

In preparation (expected 11/2020)

Teaching Experience

Assistant Instructor - M 371E, Learning Assistant Experience in Mathematics

UNIVERSITY OF TEXAS AT AUSTIN

- Instructor of Record and **CalcLab Coordinator**
- Taught undergraduates how to effectively teach and support students in the learning of mathematics.
- Ran CalcLab, a program where students enrolled in calculus courses can receive help and work with classmates.
- Transitioned CalcLab to an online Calculus resource through Zoom.

Austin, TX

Spring - Fall 2020

Minicourse Leader

UNIVERSITY OF TEXAS AT AUSTIN SUMMER MINCOURSES

- Minicourse Leader for Intro to Spectral Sequences; Equivariant Stable Homotopy Theory; and Homological Algebra.
- Gave lectures introducing graduate-level mathematics to graduate students and advanced undergraduate students.
- Created problem sets to accompany the lectures, and ran collaborative problem sessions.

Austin, TX

Summers 2017-2020

Teaching Assistant - UGS 303: From Numbers to Chaos

UNIVERSITY OF TEXAS AT AUSTIN

- Signature Course designed for first-year students to engage in college-level thinking and learning.
- Gave and facilitated lectures, and ran discussion sections using inquiry-based learning techniques.

Austin, TX

Fall 2018

Teaching Assistant and Supplemental Instruction (SI) Leader

UNIVERSITY OF TEXAS AT AUSTIN

- SI TA for M 408K (differential calculus), TA for M 408M (multivariable calculus)
- Ran discussion sections using collaborative learning strategies.

Austin, TX

Fall 2017-Spring 2018

Directed Reading Program Mentor

UNIVERSITY OF TEXAS AT AUSTIN

- Mentored 9 undergraduate student projects in various subjects in algebra and topology.

Austin, TX

Fall 2016 - Present

Mathematics Peer Mentor

RUTGERS UNIVERSITY

- Mentor for: 152H, 192H, 251H, 291H, 292H (honors integral and multivariable calculus, and honors differential equations).

New Brunswick, NJ

Fall 2012 - Spring 2015

Teaching Assistant

YOUNG SCHOLARS PROGRAM IN DISCRETE MATHEMATICS

- Mentored and worked closely with mathematically talented high school students.

New Brunswick, NJ

Summer 2013

Service

Co-Organizer

MATHEMATICIANS OF COLOR ALLIANCE AT TEXAS (MOCAT)

- Created a community of undergraduate and graduate students of color to recruit, retain, support, and empower underrepresented groups in mathematics.
- Planned expository talks, held social events, and mentored undergraduate students.

Austin, TX

Summer 2020 - Present

Organizer

SUMMER MINI-COURSES 2017-2020

- Organized a series of week-long graduate student-run minicourses on various tools and research topics.
- Gave lectures on homological algebra, spectral sequences and equivariant stable homotopy theory.
- Transitioned the Minicourse to an online format, serving over 400 participants from around the world.

Austin, TX

Summers 2017-2020

Speaker

SATURDAY MORNING MATH GROUP

- SMMG is an outreach program aimed at junior high and high school students, their parents, and their teachers.
- Gave an inquiry-based talk titled: "Surfaces, Space, and Hyperspace: An exploration of 2, 3, and higher dimensions".
- Gave an inquiry-based talk titled: "Number Games"

Austin, TX

Spring 2018, Spring 2020

Speaker

UT AUSTIN MATH CLUB

- Gave an introductory talk titled "An Overview of Algebraic Topology".
- Participated in a panel advertising summer opportunities in mathematics.
- Gave an introductory talk titled "Invertible Objects: An Elementary Introduction to Picard Groups".

Austin, TX

Spring 2017, Spring 2020

Co-Organizer

UT AUSTIN LEARNING SEMINARS

- Quantum Topology and Categorification Seminar, on TQFT and the Jones Polynomial
- Homotopy Theory Learning Seminar, on families in the stable homotopy groups of spheres.

Austin, TX

Spring 2017, Fall 2018

Treasurer

RUTGERS UNIVERSITY MATHEMATICS ASSOCIATION

- Budgeted and planned trip to the 2014 Joint Mathematics Meetings.
- Organized talks given by mathematics professors for undergraduates.
- Hosted and participated in a panel advertising summer programs in mathematics.

New Brunswick, NJ

Fall 2013 - Spring 2015

Blogger

AMS GRAD STUDENT BLOG

- Gave advice and wrote about my experiences as a math grad student.

Austin, TX

Fall 2019 - Present

Reddit Moderator

REDDIT.COM/R/MATH

- Moderator of /r/math, a mathematics community on the social news and media website reddit.com
- Established and ran graduate school and career panels for users interested in mathematics.
- Led discussions on Living Proof: Stories of Resilience Along the Mathematical Journey to foster conversations about diversity in mathematics.

Fall 2013 - Present

Scholarships, Honors & Awards

2020	FIC Graduate Student Teaching Award , UT Austin	Austin, TX
2015-2020	Provost's Graduate Excellence Fellowship , UT Austin	Austin, TX
2015	Wolfson Annual Award for Academic Excellence in Mathematics , Rutgers University	New Brunswick, NJ
2014, 2015	Weill Scholarship in Mathematics , Rutgers University	New Brunswick, NJ
2014	REU Participant , Indiana University Bloomington	Bloomington, IN
2014	John Bogart Prize , Rutgers University	New Brunswick, NJ
2013	Alan Marc Schreiber Memorial Scholarship , Rutgers University	New Brunswick, NJ

Conferences Attended

Apr. 2016	Graduate Student Topology & Geometry Conference	Indiana University Bloomington
Mar. 2017	Masterclass on Stratifications and duality in modular representation theory	University of Copenhagen
Apr. 2017	Conference on invertible objects and duality in derived algebraic geometry and homotopy theory	University of Regensburg
Jun. 2017	European Talbot Workshop - Dualities in Algebra, Geometry, and Topology	Lower Saxony, Germany
Jul. 2017	Homotopy Theory: tools and applications	UIUC
Aug. 2017	Homotopy Theory in the Ecliptic	Reed College
Mar. 2018	Midwest Topology Seminar	Northwestern University
Mar. 2018	AMS Spring Central Sectional Meeting, Special Session on Homotopy Theory	Ohio State University
May 2018	Chromatic Homotopy Theory : Journey to the Frontier	CU Boulder
Jun. 2018	Homotopy Theory Summer - Berlin 2018	Berlin Math School
Jul. 2018	Higher Structures in Homotopy Theory	Isaac Newton Institute
Jul. 2018	Young Topologist's Meeting 2018	University of Copenhagen
Mar. 2019	Speaker , Graduate Student Topology & Geometry Conference	UIUC
Jul. 2019	Speaker , Young Topologist's Meeting 2019	EPFL
Aug. 2019	Equivariant Topology & Derived Algebra: A Jolly Pleasant Conference for Greenlees	NTNU
Sep. 2019	Speaker , eCHT Kan Seminar	Online
Oct. 2019	Mayday 2019	University of Chicago
July 2020	Speaker , GROOT Summer Seminar	Online
Oct. 2020	Speaker , UChicago-Northwestern Topology Seminar	Northwestern University
Oct. 2020	Speaker , electronic Algebraic Topology Employment Network	Online
Oct. 2020	Speaker , UIUC Topology Seminar	UIUC