

Jonathan Alcaraz

EDUCATION

University of California, Riverside

PhD in Mathematics — ENROLLED

MS in Mathematics — JANUARY 2019

BS in Mathematics — JUNE 2016

TEACHING EXPERIENCE

Teaching Assistant

University of California, Riverside

2016-PRESENT

In charge of leading discussion, grading quizzes, hosting office hours, and utilizing active learning techniques. A full list of courses I have taught and links to teaching evaluations available on my website.

Instructor for College Math for the Sciences II

University of California, Riverside

SUMMER 2018

In charge of preparing and presenting lectures, hosting office hours, writing quizzes and exams, delegating and collaborating with a teaching assistant, and organizing a 7-week course.

Private Tutor

Freelance

2013-2017

Met with students to help with homework, studying, and exam preparation. Topics included high school algebra, geometry, and calculus and preparation for standardized tests such as the CBEST and the ASVAB.

CONTACT

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ON-GOING PROJECTS

Advanced Mathematics Program

SUMMER 2019

Leading a workshop in Group Theory for undergraduate students transitioning from lower-division to upper-division coursework. The program particularly targets students from under-represented groups.

Topology Qualifying Exam Prep

SUMMER 2019

Running a seminar to help junior graduate students in preparation for the topology qualifying exam.

SKILLS

🔧 Proficiency with \LaTeX

🔧 Proficiency with Google products

🔧 Experience with Linux systems

🔧 Graphic design experience

LANGUAGES

🇬🇧 English

🇪🇸 Spanish (Conversational)

HOBBIES

🏃 Jogging

🎪 Juggling

🎮 Tetris

CONFERENCES & WORKSHOPS

- 2019 | **MSRI Summer School: Geometric Group Theory**
Casa Matemática Oaxaca—JULY
- LG&TBQ**
University of Michigan—JUNE
- Graduate Student Conference in Algebra, Geometry, and Topology**
Temple University—JUNE
- MathConnections**
University of California, Riverside—MAY
- Redbud Topology Conference**
Oklahoma University—APRIL
- Graduate School on the Geometry of Teichmüller spaces**
Simons Center for Geometry and Physics—APRIL
- 2018 | **MathConnections**
University of California, Riverside—MAY
- Joint Mathematics Meeting**
San Diego Convention Center—JANUARY
- 2017 | **AMS Fall Western Sectional**
University of California, Riverside—NOVEMBER
- MathConnections**
University of California, Riverside—MAY
- MAA SoCal-Nev Section Meeting**
California State University, Northridge—APRIL

PRESENTATIONS

- 2019 | **The Bigon Criterion**
MSRI: Geometric Group Theory—9 JULY
- Constructing Atiyah-Kodaira Fibrations**
UCR Topology Seminar—23 MAY
- Your Daily Recommended Serving of Fiber Bundles**
UCR Graduate Student Seminar—8 MARCH
- The Mapping Class Groups of Some Surfaces**
UCR Topology Seminar—21 FEBRUARY
- An Introduction to Surfaces, Fiber Bundles, and Other Words**
UCR Topology Seminar—14 FEBRUARY
- 2018 | **Bigon Criterion**
UCR Topology Seminar—1 NOVEMBER
- Intersection Numbers of Simple Closed Curves on Surfaces**
UCR Topology Seminar—25 OCTOBER
- Constructing Arithmetic Hyperbolic Surfaces**
UCR Graduate Student Seminar—1 JUNE

SERVICE & PROJECTS

Microtutorial in Mathematics

2017-2019

Writing and acting in videos working out application problems in calculus, particularly in the life sciences and business calculus.

Undergraduate Research Mentor

SPRING 2019

A 10-week program helping undergraduate students learn about advanced topics in maps and understand open problems in the field.

MathConnections Co-organizer

2019

Organizing a graduate student conference at UCR in an effort bring together the math community in Southern California.

Undergraduate Research

SPRING 2016

A 10-week research project exploring results in number theory regarding perfect numbers and related topics.

Undergraduate Research

SPRING 2015

A 10-week research project exploring methods for rating and ranking for applications in sports and online content curation.