



## A Few Facts About our Faculty and Graduates

We have approximately fifty-five tenured or tenure-track faculty in the department whose research interests encompass the creation, application and teaching of mathematics.

Our faculty have received many prestigious awards including, the Dirac Medal, the von Neumann Prize, NSF Director's Award for Distinguished Teaching, Gweneth Humphreys Award for Mentorship of Undergraduate Women in Mathematics, Alfred P. Sloan Fellowship, and Clay Senior Scholar to list just a few.

Recent PhD graduates from the UArizona program are employed at the Google, Raytheon, Jacksonville University, University of British Columbia, Rincon Research, Gallaudet University, Ventana Medical Systems, Wells Fargo, the CIT Bank, and American Express.

The mathematics department works closely with the Graduate Interdisciplinary Programs in Applied Mathematics and Statistics and Data Science. Students from each "Program" and "Department" interact extensively.

The math department has a strong record of outreach, including hosting a regular public lecture (the Daniel Bartlett Memorial Lecture) and running math circles and teacher workshops for local students and teachers. Graduate students have many opportunities to be involved.

## Service and Leadership

Algebraic Geometry hosts a winter school which brings together the leaders in the field and students for an intensive week of lectures and projects. The Center also hosts a Distinguished Lecture Series.

The Center for Recruitment and Retention of Math Teachers is a leader in K-12 education and fosters collaborations between research mathematicians and educators across the spectrum of mathematics teaching.

The Department of Mathematics has a deep-seated commitment to diversity, and encourages applications from traditionally under-represented groups. We are a member of the Math Alliance Center and Alliance students may apply for an application fee waiver. The University of Arizona is a Hispanic Serving Institution and an American Indian and Alaska Native Serving Institution. Graduate students have an active chapter of the Association for Women in Mathematics (AWM).



[math.arizona.edu/graduate](http://math.arizona.edu/graduate)

Phone: 520-621-2068

Fax: 520-621-8322



## GRADUATE PROGRAM IN MATHEMATICS

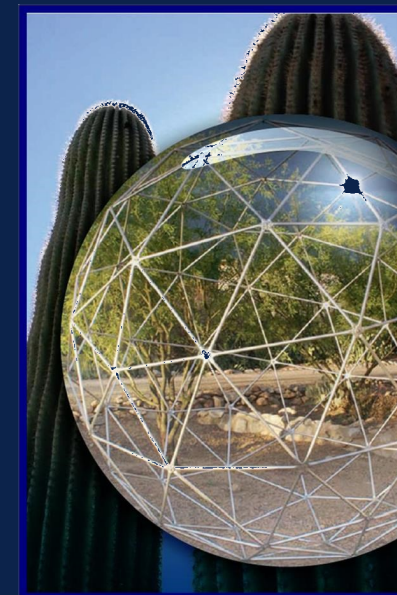
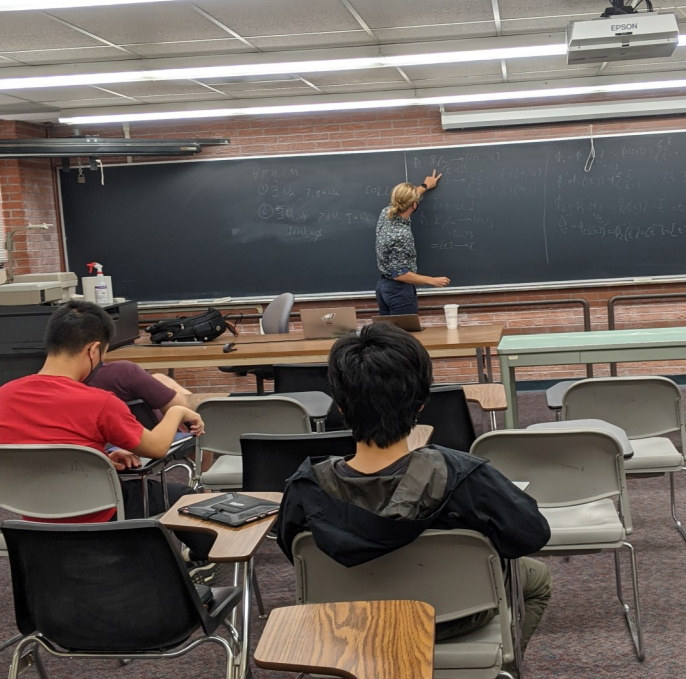


Photo by Gueda Lozano. Sculpture by Ron Granfield. Design by Roma Rado.

If you like to create mathematics, collaborate with an internationally recognized faculty, and be part of a nationally recognized tradition of innovation in teaching and curriculum development, then the Graduate Program in Mathematics at the University of Arizona is the place for you.

Graduate Director: Dr. David Glickenstein



Chapman Howard, a second year student, explaining his solution in the Geometry/Topology core course.

The Mathematics Department offers PhD, MS and MA degrees in a variety of areas encompassing the creation, application, and teaching of mathematics. As a graduate student you will master a rigorous core of foundational mathematics, including algebra, real analysis, and geometry/topology and pass qualifying examinations in these topics. Students also have many opportunities for professional development, and our program is evolving to meet the changing demands of employers.

Beginning in the first year, students are assigned to work with a faculty advisor. During their second year students participate in “research tutorial groups” and work closely with a selected faculty member on a chosen project.

After more specialized courses, students work with a faculty advisor on research. Arizona has strong research groups in a number of areas. Here is a rough classification. For more details, including a list of faculty in each area, see [math.arizona.edu/research](http://math.arizona.edu/research).

### **Algebra and Geometry**

group theory and computational group theory, number theory and arithmetical algebraic geometry, topology and geometry

### **Analysis**

analysis and its applications, dynamical systems, geometric analysis, mathematical physics

### **Applied Mathematics**

computational science and numerical analysis, fluids and mechanics, mathematical biology, nonlinear waves optical science

### **Mathematics Education**

K-12 education, undergraduate education, equity, outreach and informal mathematics, teacher education

### **Probability and Statistics**

stochastic processes, machine learning, random graphs, probability models and applications, data analysis

Students are supported by the department through a combination of fellowships and assistantships. PhD students can expect five to six years of support including tuition and individual health insurance. The cost of living in Tucson is low, especially for housing.

### **Teaching /Research Assistantships**

Our students typically have full teaching responsibility for their classes. The department provides many resources for students to improve their skills. Some faculty members support students using their research grants from the National Science Foundation or other federal agencies.

### **Fellowships and Training Grants**

The college and department offer full or partial fellowships or other support, including Outreach Scholars, NSF Transdisciplinary Research in Principles of Data Science, NIH/NIGMS Training Grant in Computational Biology, and NASA Space Grant.

### **Special Opportunities**

Some first year students are eligible for special funding, including the University Fellows Program (\$32,000 for the first year), Graduate Access Fellowships and NSF Bridge to Doctorate for underrepresented or disadvantaged groups.