

### Degrees Offered

- M.S. in Mathematics
- Ph.D. in Mathematics

### Areas of Study

- Analysis and Partial Differential Equations
- Applied and Computational Mathematics
- Differential and Algebraic Geometry
- Dynamical Systems
- Logic
- Mathematical Behavioral Sciences
- Mathematical Biology
- Mathematical Physics
- Number Theory
- Probability, Finance and Stochastic Processes

### Department Rankings

- In the latest 2010 National Research Council (NRC) ranking, the Mathematics Department at UCI was ranked in the top 10 in research activity and in the top tier in the survey based ranking.
- The UCI Mathematics program was also ranked #5 by the Chronicle of Higher Education's Faculty Scholarly Productivity Index in 2007.

### University Rankings

- UCI is ranked **#9** among public universities nationwide by U.S. News & World Report
- UCI is **#1** on Forbes magazine's list of America's Best Value Colleges
- *MONEY* magazine ranked UCI **#1** best college in the nation.



### Faculty Honors

- Our faculty have received such prestigious awards as the
  - AMS Satter Prize
  - Cole Prize in Number Theory
  - Clay Senior Scholar
  - Morningside Silver Medal of Mathematics
  - Feng Kang Prize
  - Sloan Fellowship
  - MAA Distinguished Teaching Award
  - ISAAC Award
  - Prize for Promise
  - 1<sup>st</sup> Prize in the NSF-Science Magazine Visualization Challenge
- The Department has the following honored faculty:
  - 1 National Academy of Sciences Fellows
  - 1 American Academy of Arts and Sciences Fellows
  - 2 American Association for the Advancement of Science Fellow
  - 3 Guggenheim Fellows
  - 1 ISI Highly Cited Authors

### Department Faculty List

- **Jun Allard** (*mathematical and computational biology*)
- **Vladimir Baranovsky** (*algebraic geometry, representation theory*)
- **Long Chen** (*numerical analysis, scientific computing, finite element methods, computational geometry*)
- **Michael Cranston** (*probability*)
- **Chris Davis** (*number theory, algebraic geometry*)
- **German Enciso** (*dynamical systems, mathematical and computational biology*)
- **Asaf Ferber** (*Probabilistic methods in discrete math; combinatorics, graph theory*)
- **Aleksander Figotin** (*applied mathematics, photonic crystals, foundations of electromagnetism*)
- **Matthew Foreman** (*logic, ergodic theory*)
- **Isaac Goldbring** (*logic, model theory, nonstandard analysis*)
- **Anton Gorodetski** (*dynamical systems*)
- **Patrick Guidotti** (*partial differential equations, applied mathematics*)
- **Hamid Hezari** (*analysis, partial differential equations, inverse problems*)
- **Paata Ivanisvili** (*analysis, probability, geometry, partial differential equations*)
- **Svetlana Jitomirskaya** (*mathematical physics, dynamical systems*)
- **Nathan Kaplan** (*number theory, algebraic geometry, and combinatorics*)
- **Abel Klein** (*mathematical physics, random Schrödinger operators*)
- **Natalia Komarova** (*applied mathematics, mathematical biology*)
- **Katya Krupchyk** (*analysis and partial differential equations, inverse problems and imaging*)
- **Song-Ying Li** (*several complex variables, nonlinear partial differential equations, harmonic analysis*)
- **John Lowengrub** (*mathematical materials science, mathematical fluid dynamics, mathematical biology, computational mathematics, cancer modeling, nanomaterials, quantum dots, complex fluids*)
- **Zhiqin Lu** (*differential geometry, physics, statistical physics*)
- **Connor Mooney** (*partial differential equations*)
- **Qing Nie** (*computational mathematics, systems biology, cell signaling and stem cell*)
- **Alessandra Pantano** (*representation theory*)
- **Bob Pelayo** (*data science, geometric group theory*)
- **Richard Schoen** (*geometry and topology*)
- **Manny Reyes** (*algebra, number theory*)
- **Kenneth Ascher** (*algebraic & arithmetic geometry*)
- **Alexandra Florea** (*analytic number theory*)
- **Knut Solna** (*applied mathematics, mathematical finance*)
- **Jeffrey Streets** (*geometric analysis*)
- **Li-Sheng Tseng** (*symplectic topology, mathematical physics and geometry*)
- **Roman Vershynin** (*Applied and Computational Mathematics, Probability*)
- **Jeff Viaclovsky** (*Differential Geometry and Geometric Analysis*)
- **Daqing Wan** (*number theory coding theory and computational complexity*)
- **Jesse Wolfson** (*Topology*)
- **Jack Xin** (*applied mathematics, signal processing*)
- **Yifeng Yu** (*nonlinear partial differential equations*)
- **Martin Zeman** (*logic and set theory*)
- **Xiangwen Zhang** (*geometric analysis, nonlinear partial differential equations*)
- **Hongkai Zhao** (*computational and applied mathematics*)

### Enrollment Information-Fall 2021

The Department currently has 118 students enrolled in the graduate program, 112 in the Ph.D. program and 6 in the M.S. program.

### Post-UCI Employment

- UCI graduates have gone on to postdoctoral research or faculty positions at academic institutions such as: Columbia University, Michigan State, Münster University, Tulane, University of Dundee, University of Michigan, University of Minnesota, UCLA, UCSB, UCSD, University of Texas, MIT, Tufts University, Rice University, Denison University.
- Many of our graduates find employment in industry. A few have been employed by the following organizations: China United Insurance Company, Department of Defense, Interactive Data, PayPal, Sempra Energy, United States Navy, Western Digital, Wilshire Associates, Monsanto, Google, Wells Fargo Securities, McGraw-Hill

### About Irvine

Irvine is located between Los Angeles and San Diego, in the heart of Orange County, and is one of the safest cities in the nation. The campus is located next to Newport Beach. Local interests include museums, concert halls and performing arts centers, parks and beaches, mountains, hiking trails, skiing, amusement parks, and a variety of shopping and dining locations.



### Department Events

- Weekly Seminars
- Distinguished Visitors
- Graduate Student Colloquium
- Weekly Faculty/Graduate Student Discussion Hour

### Admission Process

- A completed UCI Graduate Studies online application
- One official transcript of all undergraduate coursework
- Three letters of recommendation
- Statement of Purpose
- Scores for the General and Subject GRE exam taken within the last five years.
- TOEFL scores (only required for applicants whose primary language is not English)
- Fall admission only

### Application Deadline:

**December 1st**

(check website for more details)

For more information about admission into the UCI Math Graduate Program please visit:

<http://math.uci.edu/admission>

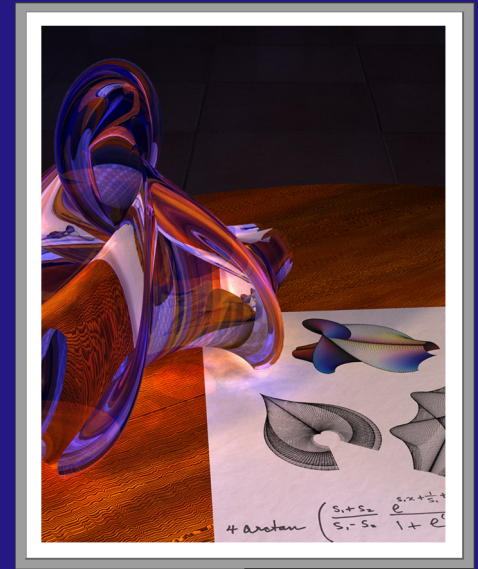
<http://www.grad.uci.edu/prospective-students/index.html>

### Housing

- Guaranteed PhD on-campus housing is available for newly admitted Fall graduate students.
- For more information, please visit:
- <http://www.housing.uci.edu/apply/Guarantees.html>

**Cover Image:** "Kuen's Surface: A Meditation on Euclid Lobachevsky, and Quantum Fields" by Richard Palais and Luc Benard.

**Inside Image:** "An in silico, vascularized tumor" by the Lowengrub group



UNIVERSITY of  
CALIFORNIA  
**IRVINE**  
Department of Mathematics

340 Rowland Hall  
Irvine, CA 92697-3875  
(949) 824-5503  
[www.math.uci.edu](http://www.math.uci.edu)