



Applied Mathematics - CU Boulder Ph.D. Information Session

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www.colorado.edu/amath



University of Colorado **Boulder**

- APM 14th in nation (US News and World Report)
- 23 Tenure-track faculty
- Research areas:
 - Computational mathematics
 - Mathematical biology
 - Mathematical geosciences
 - Applied nonlinear PDEs and dynamics
 - Statistics and data science
 - Stochastic processes and applications
- Affiliate program
 - 38 faculty members and scientists
 - AERO, ATOC, CEAE, CHEM, CS, ECEE, ECON, GEOG, MATH, MECH, PHYS, etc.



What makes CU special?



- Big R1 university
 - Interdisciplinary collaborations across departments and colleges
- National laboratories in and near Boulder
 - National Renewable Energy Laboratory
 - National Center for Atmospheric Research
 - National Oceanic and Atmospheric Administration
 - National Institute of Standards and Technology
 - National Ecological Observation Network



APPM graduate students

- PhD and PMD (and inward-facing Master's)
- 144 total APPM grad students
- 65 PhD students
 - 11 international
 - 42% female
- PhD students by the numbers:
 - 1st year: 14 (5 female / 9 male)
 - 2nd year: 16 (8 female / 8 male)
 - 3rd year: 8 (4 female / 4 male)
 - 4th year: 13 (6 female / 7 male)
 - 5th year: 8 (2 female / 6 male)
 - 6th year: 6 (2 female / 4 male)



Inclusion, Diversity and Equity efforts



- Creating inclusive community for graduate students and department
 - Graduate student mentorship
 - Tea times
 - Game and trivia nights
 - Association for Women in Mathematics (AWM) Chapter
 - QSIDE Consortium (Institute for the Quantitative Study of Inclusion, Diversity and Equity)
- Financial support for underrepresented populations
 - Rudy Horne Memorial Fellowship
 - Devaney Graduate Fellowship
- Growing and supporting diverse faculty and student body
 - Welcoming community
 - 7 faculty of color, 4 female faculty
 - Math Alliance departmental membership and mentoring

PhD program overview

- 30 hours of coursework
 - Out of department sequence
- 3 prelims (by end of 2nd year)
 - Numerical analysis (required)
 - Applied analysis (required)
 - Probability and statistics (option)
 - PDEs (option)
 - P/RP rate 83% in past 2 years
- Advisor, mentor, research plan (3rd year)
- Comprehensive exam (4th year)
- Defense and graduation (5th year)



Funding

- Department guarantees 6 years AY support
- Teaching assistantships (~years 1-2)
- Research assistantships (~years 3-5)
- Faculty funded by grants from all over
 - More than \$5 million in new awards last year
- Summer funding
 - First year fellowships
 - Graduate teaching/TA
 - Research on campus
 - Internships
 - National laboratories
 - Companies in the Front Range
- More than \$160,000 in fellowships last year



Questions

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