

Research Areas

- Actuarial Science and Risk Analytics
- Algebra (Commutative, Combinatorial, Representation Theory)
- Algebraic Combinatorics and Graph Theory
- Algebraic Geometry
- Algebraic Topology
- Applied Mathematics
- Complex Analysis
- Differential and Symplectic Geometry
- Functional Analysis (Operator Algebras, Noncommutative Probability)
- Geometric Analysis
- Geometric Group Theory
- Harmonic Analysis
- Logic
- Mathematical Biology
- Mathematical Physics
- Number Theory (Algebraic, Analytic, Coding Theory)
- Partial Differential Equations (Nonlinear Waves, Dynamics, Spectral Theory)
- Probability (Stable processes, Stochastic PDEs, Mathematical Finance, Statistical Mechanics)
- Topology (Symplectic and Low Dimensional)

Applied and Interdisciplinary Activities:

- Computational Risk Management Research Lab
- Computational Science and Engineering
- Illinois Geometry Lab
- I-Risk Lab
- Program for Interdisciplinary and Industrial Internships at Illinois (PI4)

Faculty Profiles

Rui Loja Fernandes is the **Lois M. Lackner Professor in Mathematics**. He comes to Illinois from the Department of Mathematics at Instituto Superior Técnico, Lisbon, where he was Department Head. Fernandes's recent research on Poisson geometry, integrable systems and Lie theory has led to ground-breaking publications in *Inventiones Mathematicae* and the *Annals of Mathematics*.

Philippe Di Francesco is the **Morris and Gertrude Fine Distinguished Professor of Mathematics**. Previously he held a research position at the Institut de Physique Théorique du Commissariat à l'Energie Atomique in Saclay, France. He has published over 100 papers in enumerative and algebraic combinatorics, integrable models of statistical physics and, more broadly, physical mathematics.



Contact us!

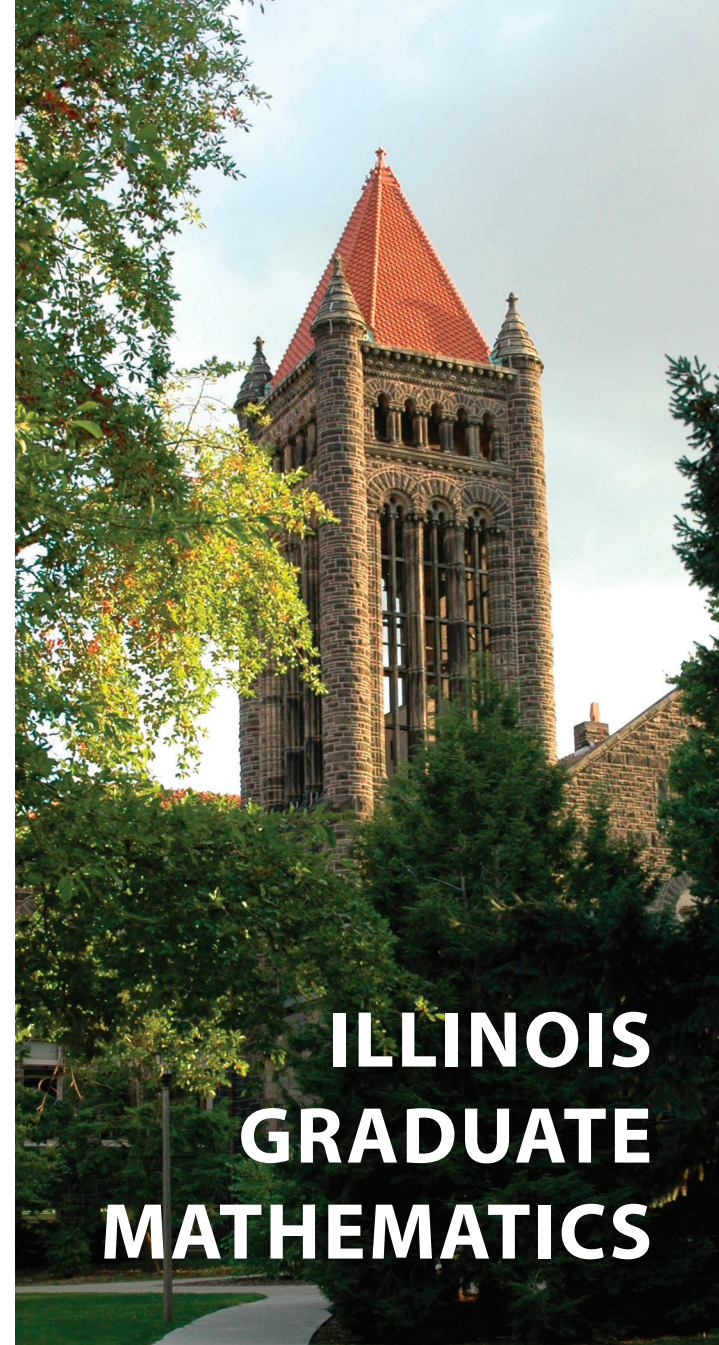
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Apply at
math.illinois.edu/GraduateAdmissions

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COLLEGE OF LIBERAL ARTS & SCIENCES

August 2018



ILLINOIS
GRADUATE
MATHEMATICS

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN



GRADUATE STUDY IN MATHEMATICS

Study at Illinois

PhD Program

- streamlined degree (early research, no language exam)
- 20+ graduate courses offered each semester
- students come from public and private universities, and liberal arts colleges
- collaborative environment
- finish in 4-6 years (average 5.5 years)
- multiple career paths (research, teaching, industry)
- conference travel
- optional summer internships
- optional concentrations in Actuarial Science & Risk Analytics and Computational Science & Engineering

MS Programs

- Actuarial Science
- Applied Mathematics
- Mathematics
- Teaching of Mathematics

Applications

GRE General Test and Mathematics Subject Test scores are required from North America-based applicants for the PhD program. Both tests are strongly recommended for all PhD applicants.

Fall application deadline: January 5

All materials must be submitted by the deadline (including three letters of recommendation and transcripts).

Financial Support for PhD Students

- Full tuition waiver
- Partial fee waiver
- Stipend \$20,400 approx. for nine months
- Teaching assistant (TA) duties are moderate: 4 hours per week in the classroom plus support activities
- Fellowship and Research Assistant funding available for some continuing students
- Living costs are moderate in this university-centered city; a one-bedroom apartment rents for about \$600–\$800 per month
- Summer support provided to most students through teaching, internal and external research grants, and scientific and industrial internships

Intellectual Community

The Urbana–Champaign campus, with approximately 33,500 undergraduate and 11,400 graduate students, is a world leader in the physical sciences, mathematics, the biological sciences, agriculture, and engineering.

The Department of Mathematics has 70 tenured or tenure-track faculty members and 20 postdoctoral faculty members. The department is based in Altgeld Hall, a beautiful stone Romanesque building in the heart of campus.

The faculty and more than 150 PhD students make a vibrant and first-rate mathematical community, pursuing research and teaching at the highest levels. Our graduate students come from all parts of the U.S. and around the world. We support an active chapter of the **Association for Women in Mathematics**, and more than sixty of our PhD students are women.

Excellent Job Placement

Around 50% of our PhD graduates win postdoctoral positions, 20% go to teaching-oriented institutions, and around 30% to industry, finance, national laboratories, and government agencies.

TA Training

- Pre-semester training
- Classroom observations and feedback
- TA peer mentoring
- Graduate College Certificate Programs

Grant-funded Research

Faculty hold around 80 research grants from the NSF, NSA, Simons Foundation, Navy, and Air Force. Many of these grants support graduate student research, including the NSF-funded Program for Interdisciplinary and Industrial Internships at Illinois (PI4) and the international network Geometric Structures and Representation Varieties (GEAR).

Diversity Commitment

We strongly encourage applications from qualified U.S. candidates in traditionally under-represented groups. Fellowship funding may be available. The University of Illinois is a nationally recognized Sloan Foundation Center for Exemplary Mentoring, and the department is a Silver level member of the Center for the National Mathematical Sciences Alliance.

math.illinois.edu/GraduateProgram

Experience Urbana–Champaign

Urbana–Champaign’s micro-urban community combines small town traffic with big city amenities such as national retailers and ethnic restaurants. Visit the Market at the Square—one of the largest and most diverse farmers’ markets in Illinois—shop at organic food co-ops, and enjoy internationally renowned music, dance, and theater at the Krannert Center for the Performing Arts. Or for easy weekend get-aways, Chicago is just 140 miles away, St. Louis 180 miles, and Indianapolis 120 miles.

Recreation

The area offers multiple opportunities for hiking, camping, mountain biking, canoeing, crosscountry skiing, and snowmobiling. Campus recreational centers feature indoor tracks and pools, a 34-foot climbing wall, and lots of court space.