| Faculty and Fields of Interest |                        |
|--------------------------------|------------------------|
| Abdelmalek Abdesselam          | Mathematical Physics   |
| Peter Abramenko                | Group Theory           |
| Julie Bergner                  | Algebraic Topology     |
| Yen Do                         | Harmonic Analysis      |
| Mikhail Ershov                 | Group Theory           |
| Juraj Földes                   | PDEs                   |
| Evangelia Gazaki               | Number Theory          |
| Christian Gromoll              | Probability            |
| Zoran Grujic                   | PDEs                   |
| Benjamin Hayes                 | Functional Analysis    |
| Ira Herbst                     | Mathematical Physics   |
| Craig Huneke                   | Commutative Algebra    |
| John Imbrie                    | Mathematical Physics   |
| Thomas Koberda                 | Geometric Topology     |
| Slava Krushkal                 | Geometric Topology     |
| Nick Kuhn                      | Algebraic Topology     |
| Sara Maloni                    | Geometry               |
| Thomas Mark                    | Geometric Topology     |
| Tai Melcher                    | Probability            |
| Jennifer Morse                 | Combinatorics          |
| Ken Ono                        | Number Theory          |
| Brian Parshall                 | Representation Theory  |
| Karen Parshall                 | History of Mathematics |
| Leonid Petrov                  | Probability            |
| You Qi                         | Representation Theory  |
| Andrei Rapinchuk               | Algebraic Groups       |
| Christian Reidys               | Applied Mathematics    |
| David Sherman                  | Operator Algebras      |
| Weiqiang Wang                  | Representation Theory  |
|                                |                        |

## **Application Information**

Get started with your application at:

http://www.math.virginia.edu/graduate/admission

**Application Deadline:** 

**January 15 annually** 

front page photo: Dan Addison



# MATHEMATICS

# **Graduate Program**

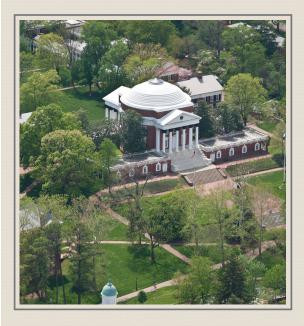
2019-20

For more information, visit our website

http://math.virginia.edu

or visit us on Facebook

http://facebook.com/UVAMath



#### **Graduate Studies at UVA**

THE MATHEMATICS DEPARTMENT offers a graduate program primarily leading to the **Doctor of Philosophy** degree in mathematics. The program provides diverse opportunities for advanced study and research in algebra, number theory, analysis, topology, geometry, probability, combinatorics, partial differential equations, mathematical physics, and history of mathematics. The mathematics department currently has 28 regular faculty members, about a dozen visitors and postdocs, and nearly 50 graduate students, creating a close-knit community of faculty and students.

All permanent mathematics faculty are internationally prominent in their research specialties and are often invited as visitors to other universities or overseas, are involved in organizing major conferences, and serve on the editorial boards of many journals. Many of our faculty have been recipients of prestigious awards including NSF CAREER awards, and Sloan, AMS, Guggenheim, and Fulbright Fellowships. Two of our faculty were invited speakers at the 2014 International Congress of Mathematicians.

#### **Application Procedure**

The application deadline is **January 15.** More detailed requirements and information can be found at <a href="http://www.math.virginia.edu/graduate/admission">http://www.math.virginia.edu/graduate/admission</a>

Please note that we do not usually admit students for a Master's degree only; our program primarily serves students seeking a PhD.

#### **Application Checklist:**

- 1. Online application;
- 2. Statement of purpose;
- 3. GRE scores (including subject test);
- 4. 2 or 3 letters of recommendation;
- 5. Unofficial transcript;
- 6. \$85 application fee;
- 7. TOEFL score (for international students).

There is no separate application form for financial aid; it is department policy to offer financial support to all admitted students.

#### **Financial Support**

Almost all mathematics doctoral graduate students receive full support throughout their study at the University, contingent upon satisfactory progress. Financial aid for entering students typically consists of teaching fellowships, which involve assisting in discussion sections of undergraduate courses. After the first year, support normally consists of teaching assistantships, which involve teaching lower division undergraduate courses such as calculus, but virtually every student receives at least two semesters free of teaching as they progress. Some students are supported through competitive university fellowships, as research assistants through faculty grants, or through the department's own Floyd Fellowship.

Academic year stipends range from \$20,000 to \$30,000, depending upon experience and duties, plus full coverage of individual health benefits. Additional summer support is normally offered to students demonstrating progress toward their degree in the summer.

Some annual **travel money** is also available for conference and collaborative travel.

#### **Graduate Classes Offered 2014-17**

| Algebra I, II, III, IV | Algebraic Number Theory        |
|------------------------|--------------------------------|
| Algebraic Geometry     | Algebraic Topology I, II       |
| Buildings              | Commutative Algebra            |
| Complex Analysis       | Differential Topology          |
| Floer Homology         | Functional Analysis            |
| Fiber Bundles          | Geometric Group Theory         |
| Harmonic Analysis      | Homotopy Theory                |
| Lie Algebras           | Lie Groups                     |
| Model Categories       | ODE and Dynamical Systems      |
| Operads                | Quantum Groups                 |
| Operator Theory        | Representation Theory          |
| Random Matrices        | Partial Differential Equations |
| Probability Theory     | Real Analysis                  |

In addition to regular classes such as those above, there are frequent reading courses and seminars in specialized topics, driven by student interest.

### The University of Virginia

UVA is one of the most respected universities in the country and is committed to maintaining its long tradition of excellence in research and education. There is a University-wide focus on graduate training and a goal to create an intellectually-stimulating environment for research, teaching, and service in order to recruit, mentor, retain, and graduate a talented and diverse community of graduate students. We believe successful graduate experiences rely on high-quality faculty, competitive financial support, and opportunities for professional and career development.

Founded by Thomas Jefferson in 1819, the University is at the heart of the beautiful city of Charlottesville. Nestled in the foothills of the Blue Ridge Mountains, Charlottesville provides ample opportunities for recreation and is easily within reach of larger cities such as Richmond and Washington,

D.C. It's easily accessible by train, air or road from the cities of the East Coast, and a short drive from Shenandoah National Park. Charlottesville is known for its history, food and music, and is at the center of the Monticello wine-growing region.

For more information on graduate student life at UVA, please visit

http://www.virginia.edu/graduateguide/