Pure and Applied Mathematics
Graduate Study at Duke University

Faculty Research Expertise

Geometry
Algebraic Geometry: **Paul Aspinwall, Richard Hain, Ezra Miller, Chad Schoen** • ***Differential Geometry and Geometric Analysis:*** **Hubert Bray, Arlie Petters, Leslie Saper, Mark Stern** • ***Symplectic Geometry:*** **Lenhard Ng**

Topology
Algebraic Topology: **Richard Hain, William Pardon, Leslie Saper** • ***Geometric Topology:*** **John Harer, Lenhard Ng**

Algebra & Number Theory
Richard Hain, Ezra Miller, Leslie Saper, Chad Schoen

Mathematical Physics
General Relativity: **Hubert Bray, Arlie Petters** • ***String Theory:*** **Paul Aspinwall, Ronen Plesser, Mark Stern**

Probability & Stochastic Analysis
Richard Durrett, Mauro Maggioni, Jonathan Mattingly, James Nolen

Analysis & Partial Differential Equations
Analysis: **Michael Reed, Mark Stern** • ***Applied Harmonic Analysis:*** **Mauro Maggioni** • ***Partial Differential Equations:*** **William Allard, Thomas Beale, Jonathan Mattingly, James Nolen, David Schaeffer** • ***Integrable Systems:*** **Stephanos Venakides, Xin Zhou**

Fluid Dynamics
Thomas Beale, Jian-Guo Liu, Jonathan Mattingly, Thomas Witelski

Mathematical Biology
Computational and Systems Biology: **William Allard, John Harer, Jian-Guo Liu, David Schaeffer** • ***Evolutionary Biology:*** **Richard Durrett, Ezra Miller** • ***Mathematical Physiology and Cell Biology:*** **Anita Layton, Harold Layton, Jonathan Mattingly, Michael Reed, Stephanos Venakides**

Numerical Analysis & Scientific Computing
Multiscale Methods: **William Allard, Anita Layton, Jian-Guo Liu, Mauro Maggioni, James Nolen, John Trangenstein** • ***Computational Geometry and Topology:*** **Paul Aspinwall, John Harer, Ezra Miller**

The Graduate Program
The graduate program in mathematics at Duke University provides a stimulating and supportive atmosphere for learning and research. Our graduate students pursue studies in pure or applied fields, leading to careers in academics, industry, and business. All doctoral students making satisfactory progress receive full financial support for five years of study.

Duke University
Duke University is consistently ranked in the top ten universities in the United States. Its outstanding computational resources and extensive library collections serve world-class research across the sciences and humanities. The university is located near downtown Durham, in the Triangle area of central North Carolina encompassing Raleigh, Durham, and Chapel Hill.

The Graduate Faculty
Advanced courses and lively seminar series are held in the areas of our faculty's expertise in pure and applied mathematics. Many faculty members participate in interdisciplinary research collaborations in biology, chemistry, computer science, engineering, physics, and statistics.

For more information, visit
http://www.math.duke.edu/graduate/
or write to dgs-math@math.duke.edu

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Application Deadline: January 8, 2010