GRADUATE PROGRAM IN

THE UNIVERSITY OF ALABAMA®
MATHEMATICS

THE DEPARTMENT

The Department of Mathematics is a small, diverse and close-knit program. We have 30 faculty members, with a sizable group of young faculty. The department has a strong track record of graduating women and African-American students. Our students do well in the job market, whether in academia, industry or government jobs.
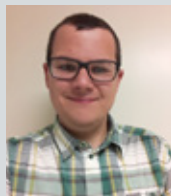
A SAMPLING OF RECENT PH.D. GRADUATES

Year	Name	Institution
2021	Katie Ford	Hexagon PPM
	Hongsong Feng	Michigan State University
	Evan Lee	The University of Alabama
	Siwen Wang	The University of Alabama
2020	Xuan Wang	The University of Alabama
2019	Brandon Reid	Milwaukee School of Engineering
	Keisha Cook	Clemson University
	Timothy Homan	The University of Alabama
	Sheik Ahmed Ullah	Regions Bank
2018	Zhihan Wei	Exabeam
	Khanh Dinh	Columbia University
	Xuan He	Math Works, Inc.
	Mingwei Sun	Samford University

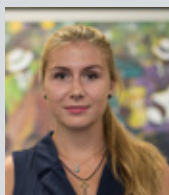### Current 4th and 5th Year Students
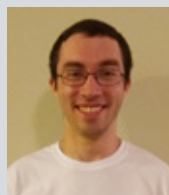
Toai Luong

John MacLellan

Awa Traore

Polina Bombina

Sharmin Afroz

Joseph Renzi

GRADUATE DEGREE PROGRAMS

Master of Arts
PhD in Mathematics
PhD in Applied Mathematics

GRADUATE STUDENTS: 45

ACCELERATED MASTER'S PROGRAM STUDENTS: 22

FINANCIAL SUPPORT FOR GRADUATE STUDENTS

Teaching Assistantships
Departmental Fellowships
University Fellowships
Faculty Research Grants
McNair Scholarships

STIPEND RATES

The current stipend is $18,450.00 plus a full tuition scholarship for the academic year (August – May). The stipend amount is adjusted periodically to reflect increases in living expenses. Additional summer support is available.

FACULTY RESEARCH AREAS

ALGEBRA
Jon Corson, *Geometric group theory*
Martyn Dixon, *Infinite group theory*
Martin Evans, *Infinite group theory*
Kyungyung Lee, *Algebra, Combinatorics, Geometry, topology, mathematical physics*

ANALYSIS
Simon Bortz, *PDEs, Harmonic analysis, geometric measure theory*
David Cruz-Uribe, *Harmonic analysis, PDEs*
Tim Ferguson, *Complex analysis, operator theory, harmonic analysis*
Kabe Moen, *Harmonic analysis, PDEs*
Yuanzhen Shao, *PDEs, geometric analysis*

TOPOLOGY
Jon Corson, *Low dimensional topology*
Lawrence Roberts, *Low dimensional topology, homology theory, knot theory*
Bulent Tosun, *Low dimensional topology, contact and symplectic geometry*
Bruce Trace, *Geometric topology*

MATH EDUCATION
Jim Gleason, *Mathematical knowledge for teaching, educational measurement*
Martha Makowski, *Math education, developmental math, STEM access, quantitative and mixed methods*

APPLIED & COMPUTATIONAL MATHEMATICS
Shibin Dai, nonlinear PDEs, *applied analysis, numerical analysis*
Layachi Hadji, *fluid dynamics, materials science*
David Halpern, *fluid dynamics, mathematics in the life sciences, scientific computing*
Mojdeh Rasoulzadeh, *homogenization method, flow and transport in heterogeneous porous media*
Roger Sidje, *numerical methods for ODEs, numerical linear algebra, computational biology*
Zheng Sun, *numerical methods for PDEs*
Chuntian Wang, *PDEs, stochastic PDEs, statistical-stochastic modeling with applications*
Shan Zhao, *numerical methods for PDEs, scientific computing, mathematical biology*
Wei Zhu, *image processing, numerical methods for PDEs*

OPTIMIZATION AND STATISTICS
Brendan Ames, *optimization, machine learning*
Yuhui Chen, *big data analysis, Bayesian nonparametric modeling, survival models, statistical computing*
Dang Nguyen, *applied probability, stochastic processes, optimal control, dynamical systems, mathematical biology*
Min Sun, *global optimization and game theory with applications, modeling, simulation*

CONTACTS

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