

ROBERT RAVIER

Department of Mathematics \diamond Duke University \diamond Box 90320

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EDUCATION

Duke University

August 2013 - Present

Ph.D. in Mathematics, Expected (2018)

Advisor: Ingrid Daubechies

Thesis: TBD

GPA: 4.00

Cornell University

August 2009 - May 2013

B.A. in Mathematics, Summa Cum Laude (2013)

Advisor: Robert Strichartz

Thesis: *Average Values of Functions on the Sierpinski Gasket*

GPA: 3.98

RESEARCH INTERESTS

Geometry Processing

Probability

Harmonic Analysis

High Dimensional Data Analysis

RESEARCH PAPERS

R. Ravier and R. Strichartz. *Sampling Theory with Average Values on the Sierpinski Gasket*. Submitted for publication.

TEACHING AND MENTORING

Data+, Duke University

Summer 2015

Mentor

Durham, NC

- Helped mentor three students studying various problems in shape analysis.

Math 111L, Duke University

Fall 2014

Instructor

Durham, NC

- Limits, continuity, differentiation, applications of derivatives, integrals, differential equations

Math 111L, Duke University

Fall 2013

Teaching Assistant

Durham, NC

- Led students in investigation of applications of derivatives and integrals.

Math Support Center, Cornell University

Spring 2011 - Spring 2013

Tutor

Ithaca, NY

- Tutored undergraduate students in all levels of mathematics coursework.

Department of Mathematics, Cornell University

Fall 2010

Grader/Course Assistant

Ithaca, NY

- Graded homework assignments for two multivariable calculus classes and one single variable calculus class, and held office hours for single variable calculus.

TALKS GIVEN

- 2016** Invited Talk, AMS East Spring Sectional Meeting, March
2013 *Sampling Theory with Average Values on the Sierpinski Gasket*, Cornell Math REU
2012 *A Numerical Method for Nonlinear Analysis on the Sierpinski Gasket*, NAU Math REU

CONFERENCES AND WORKSHOPS

- 2016** AMS East Spring Sectional Meeting, March
2015 MSRI-NIMS Summer School on Random Matrix Theory, June-July
2014 University of Chicago Summer School in Analysis, Second Session, July

OTHER EXPERIENCE

Northern Arizona University Summer 2012
Math REU Student Flagstaff, AZ

Investigated numerical methods for solving nonlinear PDE on the Sierpinski Gasket

Department of Mathematics, Cornell University Fall 2011-Spring 2012
Writer Ithaca, NY

- Coauthored a chapter of a discrete math textbook for middle school students concerning metric spaces.

HONORS AND AWARDS

- 2015-2018** NDSEG Fellow
2013 Kieval Prize, Cornell University
2013 Phi Beta Kappa