Yihe Dong Curriculum Vitae

Department of Mathematics 480 Lincoln Dr. Madison, WI 53706 ydong@math.wisc.edu

Education

Master's in Mathematics, University of Wisconsin-Madison, 2012-2015 (expected).

Area of concentration: algebraic geometry.

A.B. Mathematics, Princeton University, 2008-2012.

Selected topics of study: algebraic number theory, algebraic geometry, representation theory.

University of Georgia (dual enrollment while in high school), 2007-2008.

Proficient in C, Java, HTML, Mathematica, Matlab.

Work Experiences

Teaching Assistant. The calculus sequence. Have received above-average teaching evaluations. UW-Madison, every semester during 2012-2015.

Residential Computing Consultant. Resolving technical computing problems for students. Princeton University, 2009-12.

Independent Work

Senior thesis on automorphic forms and Galois representations, junior independent work on algebraic number theory and class field theory. Advisor: Christopher Skinner, Princeton University, 2011-12

Research on dynamical systems in neural networks. Advisor: Philip Holmes, Princeton University, 2010.

Research on quorum sensing and signaling pathway dynamics. Advisors: Bonnie Bassler and Ned Wingreen, Princeton University, summer 2009.

Research on protein engineering, Advisor: Dan Tawfik, Weizmann Institute of Science, Israel, summer 2008.

Research on maternal effects of diet restriction. Advisor: Daniel Promislow, University of Georgia: 2006-08.

Research on mutagenesis in transgenic fish. Advisor: Richard Winn, University of Georgia: 2005-06.

Publications

Y. Dong, S. Guerrero, and M. A. Moran (2008) *The American Biology Teacher* 70 (5), 279-283. Exploring Bacterial Diversity in Coastal Georgia Salt Marshes Using DNA Technology.

Y. Dong (2007) Proceedings of the 45th National Junior Science and Humanities Symposium. Maternal Effects of Diet Restriction in Fruit Flies.

Y. Dong, S. Guerrero, and M. A. Moran (2006) *The Georgia Science Teacher*. An Adventure at Sapelo and Beyond.

Talks given

Group cohomology. Graduate algebraic geometry seminar, UW-Madison, 2014

Point counting on elliptic curves. Graduate number theory seminar, UW-Madison, 2014

The Abel Jacobi map. Graduate number theory seminar, UW-Madison, 2013.

Introduction to modular forms, program for women and mathematics, IAS, 2011.

Conferences participated

Positive characteristic in algebraic geometry, 2014.

Arizona winter school in arithmetic geometry, 2013.

Program for women and mathematics, IAS, 2011.

Program in analysis and geometry, Princeton, 2011.

Honors and Awards

Mary Ellen Rudin scholarship, UW-Madison, 2013.

First Place, Intel International Science and Engineering Fair, 2008.

Intel Science Talent Search finalist (40 nationwide), 2008.

Prudential spirit of community award, 2008.

First Place and Best of Category, Intel International Science and Engineering Fair, 2007.

U.S. President's volunteer service award, 2007, 08.

U.S. Army award for outstanding science research, 2007.

Other Activities

Reporter, WPRB Princeton Radio, 2009-10.

Reporter, The Daily Princetonian, 2008.

Language proficiency: English, German, Chinese.