



Ricky Kwok

“Mathematics is the most beautiful and most powerful creation of the human spirit.” - Stefan Banach

Education

- 2009–present **Ph.D., Applied Mathematics (expected 6/2014) Adviser - Craig A. Tracy, UC Davis.**
2007–2009 **B.S., Mathematics, B.S., Physics, University of California, Davis.**
2005–2007 **Transferable Courses, University of California, Santa Cruz.**

Experience in Research and Teaching

- 2008 **Research Experience for Undergraduates, UC Davis.**
Maxwell's Equations on Lattice Spacetime - Supervised by Derek Wise
- 2008–2009 **CLIMB (Collaborative Learning at the Interface of Mathematics and Biology), UC Davis,**
- Supervised by S. Schreiber, M. A. Schwemmer, R. K. Grosberg, and C. Hom.
1. *Constraints on the use of lifespan-shortening Wolbachia to control dengue fever* with Michael Turelli
(Journal of Theoretical Biology 297 (2012) 26-32)
2. *Why does Measles persist in the United Kingdom?* with Richard McElreath
- 2009–present **Teaching Assistant and Associate Instructor, UC Davis,**
Discussion leader for Calculus I, II, and III and Real Analysis (TA).
Primary Instructor for a class on Elementary Differential Equations (AI)

Awards

- Summer 2011 **VIGRE (Vertical Integration of Research and Education).**
Algebraic Bethe Ansatz - Supervised by Craig A. Tracy
- Spring 2011 **VIGRE, Quantum Mathematical Physics** - Supervised by Alessandro Pizzo.
- 2011–2012 **Graduate Research Mentorship Fellowship.**
Six stipends of \$20,000 awarded per year to Ph.D. students who have completed one year of graduate school but not writing their dissertation. - Supervised by Craig A. Tracy
- Various **VIGRE, Travel awards for conferences or workshops ***

Conferences and Workshops

- Fall '10 **Random Matrix Theory and Its Applications I and II, MSRI, UC Berkeley.**
- 5/4-7 '11 **The Versatility of Integrability, Celebrating Igor Krichever's 60th Birthday, Columbia University.**
- 5/8-10 '11 **105th Statistical Mechanics Conference*, Rutgers, The State University of New Jersey.**
- 1/12-13 '12 **Connections for Women: Discrete Lattice Models, MSRI, UC Berkeley.**
- 1/16-20 '12 **Introductory Workshop: Lattice Models and Combinatorics, MSRI, UC Berkeley.**
- 2/20-24 '12 **Percolation and Interacting Systems, MSRI, UC Berkeley.**
- 4/15-21 '12 **Random Matrix Theory for Complex Systems, Okinawa Institute of Science and Technology.**
- 6/4-29 '12 **Summer School in Probability*, University of British Columbia in Vancouver.**

Computer Skills

- Math Packages Mathematica, \LaTeX Programming Java, C, C++, Matlab Languages