

# Sean O'Rourke

University of California, Davis  
Department of Mathematics  
One Shields Avenue  
Davis, CA 95616-8633

Email: [sdorourk@math.ucdavis.edu](mailto:sdorourk@math.ucdavis.edu)  
Homepage: <http://math.ucdavis.edu/~sdorourk/>  
Date of Birth: July 10, 1984  
Citizenship: United States

## Education

Ph.D. Mathematics, University of California, Davis, 2011.

M.A. Mathematics, University of California, Davis, 2008.

B.S. Mathematics, California Polytechnic State University, 2006.

## Experience

Rutgers University  
Triennial Assistant Professor of Mathematics

To begin September 2011

## Publications

- 1. Fluctuations of Matrix Entries of Regular Functions of Sample Covariance Random Matrices,**  
co-authored with D. Renfrew and A. Soshnikov,  
available at [arXiv:1106.0320](https://arxiv.org/abs/1106.0320) [math.PR].
- 2. On Fluctuations of Matrix Entries of Regular Functions of Wigner Matrices with Non-Identically Distributed Entries,**  
co-authored with D. Renfrew and A. Soshnikov,  
available at [arXiv:1104.1663](https://arxiv.org/abs/1104.1663) [math.PR]
- 3. Products of Independent non-Hermitian Random Matrices,**  
co-authored with A. Soshnikov,  
available at [arXiv:1012.4497](https://arxiv.org/abs/1012.4497) [math.PR]
- 4. On the Spectral Properties of Large Random Matrices with i.i.d. Entries,**  
co-authored with P. Dueck, D. Renfrew, and A. Soshnikov,  
to appear in the Proceeding's of the 13th Workshop: Non-Commutative Harmonic Analysis,  
Banach Center Publications.
- 5. Gaussian Fluctuations of Eigenvalues in Wigner Random Matrices,**  
J. Stat. Phys., Volume 138, Number 6 / March, 2010.

## Honors & Awards

Henry L. Alder Prize for Excellence in Teaching, University of California, Davis, 2010.

VIGRE Summer Research Fellowship, University of California, Davis, Summer 2010.

VIGRE Research Fellowship, University of California, Davis, Winter 2010.

VIGRE Summer Research Fellowship, University of California, Davis, Summer 2009.

VIGRE Research Fellowship, University of California, Davis, Spring 2009.

VIGRE Research Fellowship, University of California, Davis, Spring 2008.

Outstanding Mathematics Senior, California Polytechnic State University, 2006.

Dean's List, California Polytechnic State University, 2002-2006.

## Presentations & Posters

Talk at the University of California, Davis Mathematical Physics & Probability Seminar, 2011.

Short talk at the Arizona School of Analysis with Applications, March 2010.

Poster presentation at the V Brunel Workshop on Random Matrix Theory, December 2009.

Talk at the University of California, Davis Student-Run Math Seminar, 2009.

Talk at the University of California, Davis Student-Run Discrete Math Seminar, 2007.

## Teaching

Associate Instructor Linear Algebra	University of California, Davis Summer 2011
Associate Instructor Differential Calculus	University of California, Davis Fall 2010
Associate Instructor Calculus for Biology and Medicine	University of California, Davis Spring 2010
Associate Instructor Trigonometry	University of California, Davis Fall 2009
Associate Instructor Precalculus	University of California, Davis Fall 2008
Associate Instructor Linear Algebra	University of California, Davis Summer 2008
Associate Instructor Trigonometry	University of California, Davis Fall 2007
Associate Instructor Vector Analysis	University of California, Davis Summer 2007

## Conferences & Workshops

105th Statistical Mechanics Conference, May 2011.

Random Matrices Workshop at American Institute of Mathematics, December 2010.

Random Matrix Theory and its Applications II Workshop at MSRI, December 2010.

Random Matrix Theory and its Applications I Workshop at MSRI, September 2010.

Arizona School of Analysis with Applications, March 2010.

V Brunel Workshop on Random Matrix Theory, December 2009.

Random Matrix Theory Graduate Workshop at MSRI, July 2009.

## Computer Skills

C, C++, Linux, Mathematica, L<sup>A</sup>T<sub>E</sub>X.

Last updated: June 3, 2011

<http://math.ucdavis.edu/~sdorourk/>