Anirban Basak
Graduate Student
Department of Statistics, Stanford University
Email: abc@university.edu
Date: December, 2013

PERSONAL DETAILS

Born: January 30, 1986, Kolkata, India
Nationality: Indian
Gender: Male

ACADEMIC DEGREES

Stanford University, Stanford, CA, USA
Ph.D. in Statistics, September 2009- present
Thesis Topic: *Probability models on large random graphs and matrices*
Thesis Advisor - Prof. Amir Dembo

Indian Statistical Institute, Kolkata, India

- Master of Statistics (*with Distinction*), July 2007-May 2009
  Specialization - Mathematical Statistics and Probability
  Dissertation Topic: *Large dimensional Random Matrices*
  Advisor: Prof. Arup Bose

- Bachelor of Statistics (*Honors with Distinction*), July 2004-May 2007

AWARDS AND FELLOWSHIPS

1. Melvin and Joan Lane endowed Stanford Graduate Fellowship, Stanford University, September 2009- August 2012.
2. ISIAA Mrs. M. R. Iyer Gold Medal for outstanding performance in Master of Statistics, Indian Statistical Institute, Kolkata, March 2010.
3. M.A./M.Sc. Scholarship, National Board of Higher Mathematics, June 2007-May 2009.
4. J. M. Sengupta Gold Medal award for outstanding performance in Bachelor of Statistics, Indian Statistical Institute, Kolkata, February 2008.

PUBLICATIONS AND PREPRINTS

1. Basak, A., Bose, A., and Mukherjee, S.,S., "Limiting spectral distribution of a class of Hankel type random matrices". Submitted.
2. Basak, A. and Dembo, A., "Ferromagnetic Ising measures on large locally tree-like graphs". Submitted.
3. Basak, A., and Dembo, A., "Limiting spectral distribution of sum of unitary and orthogonal matrices". To appear, Electronic Communications in Probability.
4. Basak, A., Bose, A., and Sen, S., "Limiting Spectral Distribution of Sample Autocovariance Matrices". To appear, Bernoulli.
5. Basak, A. and Bose, A., "Balanced random Toeplitz and Hankel Matrices". Electronic Communications in Probability, 15, 134-148.
6. Basak, A. and Bose, A., "Limting Spectral Distribution of Some Band Matrices". Periodica Mathematica Hungarica, 63, 1, 113-150.

Ongoing Research

1. Basak, A., and Rudelson, M.,"Limiting spectral distribution of sparse directed Erdős-Rényi graphs". In preparation: writing in progress.
2. Basak, A., "Ferromagnetic Potts models on large locally tree-like graphs". In preparation.
3. Basak, A., and Basu, R., "Critical probability in a random oriented percolation model on $\mathbb{Z}^2$". In preparation.
4. Basak, A., and Mukherjee, S., "Ising model on hypercube". In preparation.

Teaching Experience

- Teaching Assistant for Stats 116, Summer 2013, Stanford University.
  Undergraduate level probability course covering discrete and continuous probability spaces, random variables and their expectations, independence, conditional probability, law of large numbers, central limit theorem.
- Teaching Assistant for Stats 310B/Math 230B, Winter 2013, Stanford University.
  Graduate level probability course covering conditional expectations, discrete time Martingales, and Markov chains on countable state space.
- Teaching Assistant for Stats 310A/Math 230A, Fall 2011, Fall 2012, Stanford University.
  Graduate level Probability course covering Measure theory, independence, weak and strong laws of large numbers, weak convergence, characteristic functions, central limit theorems.
- Teaching Assistant for Stats 310C/Math 230C, Spring 2011, Stanford University.
  Graduate level Probability course covering continuous time stochastic processes, continuous time Martingales and Markov chains, Brownian motion.
- Teaching Assistant for Stats 218, Spring 2010, Stanford University.
  Masters level Probability course covering Renewal theory, Martingales, Brownian motion.

Refereeing

Probability Theory and Related Fields, Electronic Journal of Probability.

Talks

- Probability and Statistics Seminar, Dept. of Mathematics, USC, December 2013.
- Probability Seminar, Dept. of Mathematics, UCLA, October 2013.
- Probability Seminar, Dept. of Statistics, University of California, Berkeley, September 2013.
- 36th Conference on Stochastic Processes and Their Applications, University of Colorado Boulder, July 2013.
- Probability Seminar, Dept. of Statistics and Operations Research, UNC Chapel Hill, September 2012.
- Probability Seminar, Dept. of Mathematics, MIT, September 2012.
- Probability and Mathematical Physics Seminar, Dept. of Mathematics, New York University, September 2012.
- Theoretical Statistics and Mathematics Unit seminar, Indian Statistical Institute, Kolkata, August 2012.
- Probability Seminar, Dept. of Statistics, Stanford University, June, 2012.
- Theoretical Statistics and Mathematics Unit seminar, Indian Statistical Institute, Delhi, August 2009.
- PCM International Symposium on Statistics, Indian Statistical Institute, Kolkata, July 2009.

Dr. Amir Dembo
Professor of Statistics and
Mathematics, Stanford University
http://www-stat.stanford.edu/∼adembo/
Email: abc@university.edu

Dr. Eyal Lubetzky
Senior Researcher, Theory Group of
and Microsoft Research, Redmond
http://research.microsoft.com/en-
us/um/people/eyal/
Email: abc@university.edu

Dr. Andrea Montanari
Associate Professor of Electrical
Engineering and Statistics,
Stanford University
http://www.stanford.edu/∼montanar/
Email: abc@university.edu

Dr. Ofer Zeitouni
Professor, Courant Institute of
Mathematical Sciences,
New York University
http://cims.nyu.edu/∼zeitouni/
Email: abc@university.edu