Indrajit Jana
Department of Mathematics
Temple University
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Research Interests

Probability Theory, Random Matrix Theory.

Education

2017 PhD
University of California, Davis.
Thesis title: **Spectrum of random band matrices**
Thesis Advisor: Alexander Soshnikov

2012 MS
Indian Institute of Science, Bangalore
MS project: **Matchings between point processes**
Project Supervisor: Manjunath Krishnapur

2009 Bachelor of Science (Mathematics Honours)
Ramakrishna Mission Residential College, Narendrapur
Minor: Physics, Statistics

Research Positions/experiences

2017 - current Research Assistant Professor, Temple University.
2012 - 2017 Graduate student at UC, Davis.
June, 2014 Research Assistant at UC, Davis.
2011-2012 Research fellow funded by CSIR, India at Indian Institute of Science.

Awards/Scholarships

Summer, 2015 William Karl Schwarze Scholarship. *(given to the graduate student who has demonstrated an excellence in teaching and academic ability in the Department of Mathematics at UC Davis)*
June, 2014 Research Assistant in Department of Mathematics, UC Davis.
Spring, 2014 Graduate Program Fellowship.
2012 - 2013 Graduate Program Fellowship Stipend.
2011 - 2012 Dr. Shamya Prasad Mukherjee Fellowship. *(Awarded by Council of Scientific and Industrial Research, India.)*
2009 - 2011 Ministry of Human Resource Development scholarship, India.
2009 Swami Lokeswarananda award *(for overall best performance in Ramakrishna Mission Residential College, Narendrapur.)*
2006 - 2009 Swami Vivekenanda Merit-cum-Means Scholarship.

Travel Awards

December, 2016	Departmental travel award, UC Davis.
June, 2015	Travel support by MSRI.
December, 2014	UC Davis, international travel award for grad students.
December, 2014	Departmental travel award, UC Davis.

Other Achievements

2010	11th rank (All India Rank) in National Eligibility Test (mathematics).
2009	7th rank (All India Rank) in IIT, JAM statistics subject test.
2009	20th rank (All India Rank) in IIT, JAM mathematics subject test.

Publications/Preprints

(1) CLT for non-Hermitian random band matrices with variance profiles.
arXiv preprint arXiv:1904.11098 (submitted)

(2) Linear eigenvalue statistics of random matrices with a variance profile. (with Kartick Adhikari, Koushik Saha)
arXiv preprint arXiv:1901.09404, 2019 (submitted)

(3) Distribution of singular values of random band matrices; Marchenko-Pastur law and more. (with Alexander Soshnikov)
Journal of Statistical Physics, 168(5), 964-985, doi:10.1007/s10955-017-1844-5

(4) Fluctuations of Linear Eigenvalue Statistics of Random Band Matrices. (with Koushik Saha, Alexander Soshnikov)
Theory of Probablity and Applications Vol. 60, No. 3, 407–443, (2016)

Teaching Experience

As an instructor.

Spring, 2020	Calculus II (MATH 1042, Temple University)
Fall, 2019	Calculus III (MATH 2043, Temple University)
Spring, 2019	Mathematical Statistics (MATH 3032, Temple University)
Fall, 2018	Probability Theory (MATH 3031, Temple University)
Spring, 2018	Statistics (MATH 2031, Temple University)
Spring, 2018	Probability Theory (MATH 3031, Temple University)
Fall, 2017	Calculus III (MATH 2043, Temple University)
Summer, 2016	Vector Analysis (MAT 21D, UC Davis)
Summer, 2015	Vector Analysis (MAT 21D, UC Davis)
Summer, 2014	Modern Linear Algebra (MAT 67, UC Davis)
Summer, 2013	Short Calculus (MAT 16A, UC Davis)

As a teaching assistant (at UC, Davis).

Winter, 2017	Real Analysis (MAT 125A)
Fall, 2016	Modern Linear Algebra (MAT 67)
Fall, 2016	Lead TA for Vector Analysis (MAT 21D)
Spring, 2016	Stochastic Processes (MAT 135B)
Winter, 2016	Real Analysis (MAT 201B) (Graduate Course)
Fall, 2015	Real Analysis (MAT 201A) (Graduate Course)
Spring, 2015	Stochastic Processes (MAT 135B)
Winter, 2015	Probability Theory (MAT 135A)
Fall, 2014	Real Analysis (MAT 201A) (Graduate Course)
Spring, 2014	Linear Algebra (MAT 22A)
Winter, 2014	Linear Algebra (MAT 22A)
Fall, 2013	Probability Theory (MAT 135A)
Spring, 2013	Vector Analysis (MAT 21D)

Winter, 2013 Linear Algebra (MAT 22A)
Fall, 2012 Pre-calculus (MAT 12), and Short Calculus (MAT 16A)
Fall, 2011 Probability Models (MA 261, IISc bangalore).

Recent Workshops/Conferences

2019 (contributed session) Stochastic Processes and their Applications.
2018 (Invited speaker) Mathematics seminar at University of Colorado, Boulder.
2018 Mathematics seminar at IISER, Kolkata.
2018 (Poster) Seminar on Stochastic Processes at Brown University.
2018 (Speaker) Frontier Probability Days at Oregon state University.
2017 (Invited speaker) Mathematics seminar at University of Virginia.
2017 (Contributed talk) Dyson-Schwinger summer school at Columbia University.
2017 (Invited speaker) Mathematics seminar at IISER Mohali, India.
2017 (Poster presentation) PCMI summer session.
2016 (Poster presentation)XII Brunel-Bielefeld Workshop on Random Matrix Theory.
2016 (Invited speaker) AMS sectional meeting, Denver, CO.
2016 (Invited speaker) Probability seminar, Indian Institute of Technology, Bombay.
2016 Summer School on Random Matrices, University of Michigan, Ann Arbor.
2015 CRM-PIMS Summer School in Probability, McGill University.
2014 (Invited speaker) Davis math conference.
2014 (Poster presentation) X Brunel-Bielefeld Workshop on Random Matrix Theory.

Languages/Hobbies

Bengali, CSS, English, Español, Hindi, HTML, MATLAB, Python, Tabla-Drums.