

Pratima Hebbar

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Employment **Department of Mathematics and Statistics, Grinnell College**
Assistant Professor (tenure-track)
Fall 2022 - present

Department of Mathematics, Duke University
Griggs Assistant Research Professor
Fall 2019 - Summer 2022

Education **Department of Mathematics, University of Maryland, College Park**
Ph.D., August 2019
Advisor: Dr. Leonid Korolov
Awarded Alexander Prize for Graduate Research in Mathematics for top dissertation by the Department of Mathematics.

Tata Institute of Fundamental Research Centre for Applicable Mathematics, Bengaluru, India
M.Sc. in Mathematics, May 2014

University of Pune, India
B.Sc. in Mathematics, May 2012
Graduated with rank 1 in the Department of Mathematics

Honors and Awards 2022-23 Project NExT, Red '22 cohort
2021-22 Preparing Future Faculty Fellow, Duke University (awarded to five Duke university postdocs each academic year)
2021-22 Teaching for Equity Fellow, Duke University (year-long series of workshops designed to address topics around race and identity)
October 2019 Alexander Prize for Graduate Research in Mathematics - awarded to the top dissertation by the Department of Mathematics.
March 2019 Jacob K. Goldhaber Travel Grant
April 2018 Aziz Osborn Gold Medal in Teaching Excellence
2017- 2018 Patrick and Marguerite Sung Fellowship in Mathematics
April 2016 Seymour Goldberg Gold Medal (Spotlight on Graduate Research).
2014{2016 Dean's Fellowship, University of Maryland, Graduate School.
2012{2014 Junior Research Fellowship, Tata Institute of Fundamental Research.

Publications

P. Hebbar, K. Fernando, Higher order asymptotics for large deviations { Part III, in preparation (2021).

A. Bonafede, P. Hebbar, P. Pherwani, Birth and death processes with deterministic mass growth and symmetric mass division among offspring, **collaboration with**

undergraduate students, in preparation, preprint available upon request (2021)

P. Hebbar, K. Fernando, Higher order asymptotics for large deviations { Part II, Stochastics and Dynamics, Vol. 21, No. 05, 2150025 (2021).

P. Hebbar, L. Korolov, J. Nolén, Asymptotic behavior of branching diffusion processes in periodic media, Electronic Journal of Probability, vol. 25, paper no. 126, 40 pp doi:10.1214/20-EJP527 (2020).

P. Hebbar, K. Fernando, Higher order asymptotics for large deviations { Part I, Asymptotic Analysis, vol. Pre-press, pp. 1-39, doi:10.3233/ASY-201602 (2020).

D.Dolgopyat, P. Hebbar, L. Korolov, M. Perlman, Multi-type branching processes with time-dependent branching rates", Journal of Applied Probability, 55(3), 701-727. doi:10.1017/jpr.2018.46 (2018).

P. Hebbar Branching diffusion processes in periodic media, **Ph.D Dissertation**, August 2019.

Hebbar P. Testing the waters of differential equations, Physics Today Volume 73, Issue 7, Page 54 (**Book Review**) ; doi.org/10.1063/PT.3.4525 (2020)

Invited Talks

2022 Union College Mathematics Conference, Session on Stochastic Analysis and Applications, Schenectady, June 4th, 2022.

Colloquium, Rutgers University - Camden, November 12th, 2021.

Colloquium, North Carolina Central University (NCCU), October 26th, 2021.

Probability Seminar, Duke University, October 21st, 2021.

Computational & Applied Mathematics Seminar, University of North Carolina Charlotte (UNCC), October 15th, 2021.

SURE: Speakers and Undergraduate Research Engagement, Virginia Tech, USA October 11th, 2021.

CRM-ISM Probability Seminar, Centre de Recherches Mathématiques (CRM) Montreal, Canada, November 4th, 2020.

Probability and Statistical Physics Seminar, University of Chicago, October 23rd, 2020.

National Webinar on Galton-Watson Processes, MES Garware College, Pune, India, October 5th, 2020.

Probability Seminar, University of Virginia, February 5th, 2020.

Probability Seminar, Duke University, USA, September 26th, 2019.

Conference { Perturbation Techniques in Stochastic Analysis and Its Applications, CIRM, France, March 14th 2019.

Probability Seminar, University of Washington, USA, March 4th 2019

Probability/Math Finance Seminar, Carnegie Mellon University, USA, January 28th 2019.

Probability Seminar, Boston University, USA, January 24th 2019

Perturbation Techniques in Stochastic Analysis and Its Applications, Centre International de Rencontres Mathematiques (CIRM), Luminy, Marseille, France (March 11 -15, 2019).

Advances in Asymptotic Probability (In honor of Amir Dembo's 60th birthday), Stanford University, Stanford, USA (Dec 13 - 17 2018).

Northeast Probability Seminar, NYU Courant Institute, New York, USA (Nov 15 -16 2018).

Seminar on Stochastic Processes, Brown University, Providence, USA (May 9-12, 2018).

Transport and Localization in Random Media, Columbia University, New York, USA (May 1-3, 2018).

Dynamics, Aging and Universality in Complex Systems (A celebration in honor of Gerard Ben Arous), NYU Courant Institute, New York, USA (June 19 -23 2017).

Research School on Random Structures in Statistical Mechanics and Mathematical Physics , Centre International de Rencontres Mathematiques (CIRM), Luminy, Marseille, France (March 6 -10, 2017).

Workshop on probabilistic methods in dynamical systems and applications, Centre de Recherches Mathematiques, Montreal, Canada (October 4-7, 2016).

MSRI - Dynamics of Biological Systems, University of Alberta, Edmonton, Canada (May 30 - June 11 2016).

Seminar on Stochastic Processes, University of Maryland, College Park, USA (March 16-19, 2016).

Getting started with PDE's, Hebrew University, Jerusalem, Israel (Sept 3-9 2015).

Mathematics Training and Talent Search Program, IIT Kanpur, India (May 2012).

Mathematics Training and Talent Search Program, ICT Mumbai, India (May 2011).

Mathematics Training and Talent Search Program, Visva Bharati University, Santiniketan, India (May 2010).

Relevant
Skills

Languages: English, Hindi, Marathi, Kannada, Bengali