

Mohammad Foondun

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Education:

- Ph.D in Mathematics,
University of Connecticut, 2003-2006.

Thesis title: *Harnack inequality for integro-differential operators.*

Advisor: Richard Bass.

- M.S in Mathematics,
University of Connecticut, 2001-2002.
- B.S in Mathematics,
University of Mauritius, 2000.

Professional Experience:

- Lecturer(tenure-track Assistant Professor),
Loughborough University, 2009-present
- Postdoctoral Fellow,
University of Utah, 2006-2009
- Graduate Assistant,
University of Connecticut, 2001-2006

Research Interests:

- Probability, Stochastic Analysis, Stochastic partial differential equations.

Preprints-Publications:

- Harmonic functions for a class of integro-differential operators. *Potential analysis*, 31(2009), no.1, 22-44
- Heat kernel estimates and Harnack inequalities for some Dirichlet forms with non-local part. *Electronic Journal of Probability*, 14(2009), no.11, 314-340

- Intermittence and nonlinear parabolic stochastic differential equations. (with Davar Khoshnevisan) *Electronic Journal of Probability*, 14(2009), no.21, 548–568
- On the global maximum of the solution to a stochastic heat equation with compact-support initial data. (with Davar Khoshnevisan) *to appear in Annales de l'institut H. Poincare*
- A local time correspondence for stochastic partial differential equations. (With Davar Khoshnevisan and Eulalia Nualart) *to appear in Transaction of A.M.S*
- An asymptotic theory for randomly-forced discrete nonlinear heat equations. (with Davar Khoshnevisan) *submitted*
- Dynkin's isomorphism theorem and the stochastic heat equation. (with Nathalie Eisenbaum and Davar Khoshnevisan) *submitted*
- An inequality for a class of Markov Processes. *submitted*

Working papers:

- Lévy processes, the stochastic heat equation with spatially colored forcing and weak intermittency. (temporary title with Davar Khoshnevisan)

Refereeing:

- Stochastic Processes and their Applications, *Annals of Probability*, *Journal of Applied Mathematics* and *Stochastic Analysis*.

Talks:

- Stochastic Seminar Fall 2006 at the University of Utah
- Stochastic Seminar Spring 2007 at the University of Utah
- Invited session at SPA 2007- Summer 2007
- Stochastic seminar Fall 2007 at the University of Utah
- AMS sectional meeting Fall 2008 at the University of Alabama, Huntsville
- International Conference on Stochastic Analysis, Hammamet, Tunisia, October 2009

Student supervision:

- Hannah Nam-undergraduate thesis. Title: Markov Chains and Coupling.

Languages:

- Creole
- French
- English

Citizenship: Mauritius