

## **CURRICULUM VITAE**

**Jonathan Christopher Mattingly, Ph.D., M.A., B.S.**

**Professor of Mathematics**

Prepared: April 8, 2019

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### **CURRENT APPOINTMENTS AND AFFILIATIONS**

Professor of Mathematics

Chair of the Department of Mathematics

Professor of Statistical Science

### **EDUCATION, TRAINING AND CERTIFICATIONS**

High School Diploma, NCSSM 1988

Ph.D., Princeton University 1998

M.A., Princeton University 1996

B.S., Yale University 1992

### **DUKE APPOINTMENT HISTORY**

Professor in the Department of Mathematics 2012 - 2018

Professor in the Department of Statistical Science 2012 - 2018

Associate Professor, Statistical Science 2008 - 2011

Associate Professor of Mathematics, Mathematics 2006 - 2012

Assistant Professor of Mathematics, Mathematics 2002 - 2005

### **OTHER ACADEMIC POSITIONS**

Summer Intern, Bell Labs, Lucent. 1996 - 1996

Post-Doctoral Member, MSRI, UC Berkely. 1998 - 1998

Instructor Franco-Iranian Summer School, Zanjan, Iran. 2005 - 2005

Visiting Professor, Berlin Summer School, TU Berlin. 2009 - 2009

Visiting Scholar, Mathematics Institute, Warwick University. 2000 - 2000

Simons Professor, MSRI, UC Berkeley. 2015 - 2015

Visiting Member, Centro De Giorgi, SNS Pisa, Italy. 2006 - 2006

Visiting Professor, University de Marseilles. 2002 - 2002

Visiting Professor, MSRI, UC Berkeley. 2007 - 2007

Szego Assistant Professor of Mathematics, Stanford University. 1998 - 2002

Visiting Professor, University de Marseilles. 2010 - 2010

Visiting Professor, University de Nice. 2012 - 2012

Principle Lecturer, Saint Flour Summer school in Probability. 2007 - 2007

NSF Post-Doctoral Fellow, Stanford University. 1999 - 2002

Member special year in SPDE/Tubulence, Institute for Advance Study, Princeton. 2002 - 2003

Visiting Professor, University de Paris VI. 2008 - 2008

Visiting Member, Institut Universitaire de France. 2003 - 2003

Contractor, AT&T Shannon Labs. 1999 - 1999

## PUBLICATIONS

### Academic Articles

Hairer, M, and Mattingly, J. "The strong Feller property for singular stochastic PDEs." *Annales De L'Institut Henri Poincaré, Probabilités Et Statistiques* 54.3 (August 2018): 1314-1340.

Herschlag, G, Ravier, R, and Mattingly, JC. "Evaluating Partisan Gerrymandering in Wisconsin." (September 2, 2017).

Bakhtin, Y, Hurth, T, Lawley, SD, and Mattingly, JC. "Smooth invariant densities for random switching on the torus(Submitted)." (August 1, 2017).

Johndrow, JE, and Mattingly, JC. "Coupling and Decoupling to bound an approximating Markov Chain (Submitted)." (July 31, 2017).

Glatt-Holtz, NE, Herzog, DP, and Mattingly, JC. "Scaling and Saturation in Infinite-Dimensional Control Problems with Applications to Stochastic Partial Differential Equations(Accepted)." *Annals of Pde* (June 30, 2017).

Glatt-Holtz, N, Mattingly, JC, and Richards, G. "On Unique Ergodicity in Nonlinear Stochastic Partial Differential Equations." *Journal of Statistical Physics* 166.3-4 (February 1, 2017): 618-649.

Cooke, B, Herzog, DP, Mattingly, JC, Mckinle, SA, and Schmidler, SC. "Geometric ergodicity of two-dimensional hamiltonian systems with a Lennard-Jones-like repulsive potential." *Communications in Mathematical Sciences* 15.7 (January 1, 2017): 1987-2025.

Tempkin, JOB, Kotten, BV, Mattingly, JC, Dinner, AR, and Weare, J. "Trajectory stratification of stochastic dynamics(Accepted)." *Siam Review* (2016).

Bakhtin, Y, Hurth, T, and Mattingly, JC. "Regularity of invariant densities for 1D systems with random switching." *Nonlinearity* 28.11 (September 30, 2015): 3755-3787.

Herzog, DP, and Mattingly, JC. "A practical criterion for positivity of transition densities." *Nonlinearity* 28.8 (July 10, 2015): 2823-2845.

Lawley, SD, Mattingly, JC, and Reed, MC. "Stochastic switching in infinite dimensions with applications to random parabolic PDE." *Siam Journal on Mathematical Analysis* 47.4 (January 1, 2015): 3035-3063.

Huckemann, S, Mattingly, JC, Miller, E, and Nolen, J. "Sticky central limit theorems at isolated hyperbolic planar singularities." *Electronic Journal of Probability* 20 (January 1, 2015).

Munch, E, Turner, K, Bendich, P, Mukherjee, S, Mattingly, J, and Harer, J. "Probabilistic Fréchet means for time varying persistence diagrams." *Electronic Journal of Statistics* 9 (January 1, 2015): 1173-1204.

Herzog, D, and Mattingly, J. "Noise-induced stabilization of planar flows II." *Electronic Journal of Probability* 20.0 (2015).

Luo, S, and Mattingly, JC. "Scaling limits of a model for selection at two scales." (2015). PMID: 28867875. PMCID: 28867875.

Herzog, DP, and Mattingly, JC. "Noise-Induced Stabilization of Planar Flows II." (April 2014).

Mattingly, JC, and Pardoux, E. "Invariant measure selection by noise. An example." *Discrete and Continuous Dynamical Systems Series A* 34.10 (January 1, 2014): 4223-4257.

Lawley, SD, Mattingly, JC, and Reed, MC. "Sensitivity to switching rates in stochastically switched ODEs." *Communications in Mathematical Sciences* 12.7 (January 1, 2014): 1343-1352.

Mattingly, JC, and Vaughn, C. "Redistricting and the Will of the People." arXiv preprint arXiv:1410.8796 (2014). (Academic Article)

Hotz, T, Huckemann, S, Le, H, Marron, JS, Mattingly, JC, Miller, E, Nolen, J, Owen, M, Patrangenaru, V, and Skwerer, S. "Sticky central limit theorems on open books." *The Annals of Applied Probability* 23.6 (December 2013): 2238-2258.

Mattingly, JC, McKinley, SA, and Pillai, NS. "Geometric ergodicity of a bead-spring pair with stochastic Stokes forcing." *Stochastic Processes and Their Applications* 122.12 (December 1, 2012): 3953-3979.

Luo, S, Reed, M, Mattingly, JC, and Koelle, K. "The impact of host immune status on the within-host and population dynamics of antigenic immune escape." *J R Soc Interface* 9.75 (October 7, 2012): 2603-2613. PMID: 22572027. PMCID: 22572027.

Athreyaz, A, Kolba, T, and Mattingly, JC. "Propagating Lyapunov functions to prove noise-induced stabilization." *Electronic Journal of Probability* 17 (2012).

Porporato, A, Kramer, PR, Cassiani, M, Daly, E, and Mattingly, J. "Local kinetic interpretation of entropy production through reversed diffusion." *Phys Rev E Stat Nonlin Soft Matter Phys* 84.4 Pt 1 (October 2011): 041142-null. PMID: 22181122. PMCID: 22181122.

Hairer, M, and Mattingly, JC. "Yet Another Look at Harris' Ergodic Theorem for Markov Chains." (2011): 109-117.

Hairer, M, Mattingly, JC, and Scheutzow, M. "Asymptotic coupling and a general form of Harris' theorem with applications to stochastic delay equations." *Probability Theory and Related Fields* 149.1 (2011): 223-259.

Anderson, DF, and Mattingly, JC. "A weak trapezoidal method for a class of stochastic differential equations." *Communications in Mathematical Sciences* 9.1 (2011): 301-318.

Hairer, M, and Mattingly, JC. "A theory of hypoellipticity and unique ergodicity for semilinear stochastic PDEs." *Electronic Journal of Probability* 16 (2011): 658-738.

Koelle, K, Ratmann, O, Rasmussen, DA, Pasour, V, and Mattingly, J. "A dimensionless number for understanding the evolutionary dynamics of antigenically variable RNA viruses." *Proceedings of the Royal Society B: Biological Sciences* 278.1725 (2011): 3723-3730. PMID: 21543353. PMCID: 21543353.

Mattingly, JC, Stuart, AM, and Tretyakov, MV. "Convergence of numerical time-averaging and stationary measures via Poisson equations." *Siam Journal on Numerical Analysis* 48.2 (2010): 552-577.

Hairer, M, and Mattingly, JC. "Slow energy dissipation in anharmonic oscillator chains." *Communications on Pure and Applied Mathematics* 62.8 (2009): 999-1032.

Iyer, G, and Mattingly, J. "A stochastic-Lagrangian particle system for the Navier-Stokes equations." *Nonlinearity* 21.11 (November 1, 2008): 2537-2553.

Martin Hairer, . "Spectral gaps in Wasserstein distances and the 2D stochastic Navier-Stokes equations." *Annals of Probability* 6 (2008): 993-1032. (Academic Article)

Anderson, DF, and Mattingly, JC. "Propagation of fluctuations in biochemical systems, II: nonlinear chains." *Iet Systems Biology* 1.6 (November 1, 2007): 313-325.

Mattingly, JC, Suidan, T, and Vanden-Eijnden, E. "Simple systems with anomalous dissipation and energy cascade." *Communications in Mathematical Physics* 276.1 (November 1, 2007): 189-220.

Bakhtin, Y, and Mattingly, JC. "Malliavin calculus for infinite-dimensional systems with additive noise." *Journal of Functional Analysis* 249.2 (August 15, 2007): 307-353.

Anderson, DF, Mattingly, JC, Nijhout, HF, and Reed, MC. "Propagation of fluctuations in biochemical systems, I: Linear SSC networks." *Bulletin of Mathematical Biology* 69.6 (August 1, 2007): 1791-1813.

Anderson, DF, Mattingly, JC, Nijhout, HF, and Reed, MC. "Propagation of fluctuations in biochemical systems, I: linear SSC networks." *Bulletin of Mathematical Biology* 69.6 (August 2007): 1791-1813. PMID: 17457656. PMCID: 17457656.

Lamba, H, Mattingly, JC, and Stuart, AM. "An adaptive Euler-Maruyama scheme for SDEs: Convergence and stability." *Ima Journal of Numerical Analysis* 27.3 (July 1, 2007): 479-506.

Mattingly, JC, Suidan, TM, and Vanden-Eijnden, E. "Anomalous dissipation in a stochastically forced infinite-dimensional system of coupled oscillators." *Journal of Statistical Physics* 128.5 (2007): 1145-1152.

Nijhout, HF, Reed, MC, Anderson, DF, Mattingly, JC, James, SJ, and Ulrich, CM. "Erratum to H. Frederik Nijhout, et al. *Epigenetics* Volume 1, Issue 2; pp. 81-87." *Epigenetics* 1.3 (July 2006): 115-115.

Nijhout, HF, Reed, MC, Anderson, DF, Mattingly, JC, James, SJ, and Ulrich, CM. "Long-range allosteric interactions between the folate and methionine cycles stabilize DNA methylation reaction rate." *Epigenetics* 1.2 (April 2006): 81-87. PMID: 17998813.

Hairer, M, and Mattingly, JC. "Ergodicity of the 2D Navier-Stokes equations with degenerate stochastic forcing." *Annals of Mathematics* 164.3 (2006): 993-1032.

Mattingly, JC, and Pardoux, É. "Malliavin calculus for the stochastic 2D Navier-Stokes equation." *Communications on Pure and Applied Mathematics* 59.12 (2006): 1742-1790.

Bakhtin, Y, and Mattingly, JC. "Stationary solutions of stochastic differential equations with memory and stochastic partial differential equations." *Communications in Contemporary Mathematics* 7.5 (October 1, 2005): 553-582.

Mattingly, JC, and Suidan, TM. "The Small Scales of the Stochastic Navier-Stokes Equations Under Rough Forcing." *Journal of Statistical Physics* 118.1-2 (January 2005): 343-364.

Hairer, M, and Mattingly, JC. "Ergodic properties of highly degenerate 2D stochastic Navier-Stokes equations." *Comptes Rendus Mathématique* 339.12 (December 15, 2004): 879-882.

Hairer, M, Mattingly, JC, and Pardoux, E. "Malliavin calculus for highly degenerate 2D stochastic Navier-Stokes equations." *Comptes Rendus Mathématique* 339.11 (December 1, 2004): 793-796.

Hairer, M, Mattingly, JC, and Pardoux, E. "Malliavin calculus and ergodic properties of highly degenerate 2D stochastic Navier-Stokes equation." *arXiv preprint math/0409057* (2004). (Academic Article)

Mattingly, JC, Mattingly, JC, and Mattingly, JC. "On recent progress for the stochastic Navier Stokes equations On recent progress for the stochastic Navier Stokes equations On Recent Progress for the Stochastic Navier Stokes Equations." *Journées "Équations aux Dérivées Partielles" XV* (July 2003): viii+298-. (Academic Article)

Mattingly, JC. "Contractivity and ergodicity of the random map  $x \rightarrow \cdot$ ." *Theory of Probability and Its Applications* 47.2 (June 26, 2003): 333-343.

Mattingly, JC. "The dissipative scale of the stochastic Navier-Stokes equation: Regularization and analyticity." *Journal of Statistical Physics* 108.5-6 (December 1, 2002): 1157-1179.

Mattingly, JC. "Exponential convergence for the stochastically forced Navier-Stokes equations and other partially dissipative dynamics." *Communications in Mathematical Physics* 230.3 (November 1, 2002): 421-462.

Mattingly, JC, Stuart, AM, and Higham, DJ. "Ergodicity for SDEs and approximations: Locally Lipschitz vector fields and degenerate noise." *Stochastic Processes and Their Applications* 101.2 (October 1, 2002): 185-232.

Mattingly, JC, and Stuart, AM. "Geometric ergodicity of some hypo-elliptic diffusions for particle motions." *Markov Processes and Related Fields* 8 (2002): 199-214. (Academic Article)

Mattingly, JC. "Contractivity and ergodicity of the random map  $x \mapsto |x - \theta|$ ." *Teoriya Veroyatnostei I Ee Primeneniya* 47.2 (2002): 388-397.

Weinan, E, Mattingly, JC, and Sinai, Y. "Gibbsian dynamics and ergodicity for the stochastically forced Navier-Stokes equation." *Communications in Mathematical Physics* 224.1 (December 1, 2001): 83-106.

Weinan, E, and Mattingly, JC. "Ergodicity for the Navier-Stokes equation with degenerate random forcing: Finite-dimensional approximation." *Communications on Pure and Applied Mathematics* 54.11 (November 1, 2001): 1386-1402.

Mattingly, JC. "Ergodicity of 2D Navier-Stokes equations with random forcing and large viscosity." *Communications in Mathematical Physics* 206.2 (January 1, 1999): 273-288.

Mattingly, JC, and Sinai, YG. "An elementary proof of the existence and uniqueness theorem for the Navier-Stokes equations." *Communications in Contemporary Mathematics* 1.4 (January 1, 1999): 497-516.

Holmes, PJ, Lumley, JL, Berkooz, G, Mattingly, JC, and Wittenberg, RW. "Low-dimensional models of coherent structures in turbulence." *Physics Report* 287.4 (January 1, 1997): 337-384. (Review)

Johndrow, JE, Mattingly, JC, Mukherjee, S, and Dunson, D. "Optimal approximating Markov chains for Bayesian inference."

Bangia, S, Graves, CV, Herschlag, G, Kang, HS, Luo, J, Mattingly, JC, and Ravier, R. "Redistricting: Drawing the Line."

Herzog, DP, and Mattingly, JC. "Ergodicity and Lyapunov functions for Langevin dynamics with singular potentials."

Johndrow, JE, and Mattingly, JC. "Error bounds for Approximations of Markov chains."

Wang, C, Mattingly, J, and Lu, YM. "Scaling Limit: Exact and Tractable Analysis of Online Learning Algorithms with Applications to Regularized Regression and PCA."

Herschlag, G, Kang, HS, Luo, J, Graves, CV, Bangia, S, Ravier, R, and Mattingly, JC. "Quantifying Gerrymandering in North Carolina."

Gao, Y, Kirkpatrick, K, Marzuola, J, Mattingly, J, and Newhall, K. "Limiting Behaviors of High Dimensional Stochastic Spin Ensembles."

Agazzi, A, and Mattingly, JC. "Seemingly stable chemical kinetics can be stable, marginally stable, or unstable."

Li, L, Lu, J, Mattingly, J, and Wang, L. "Numerical methods for stochastic differential equations based on Gaussian mixture."

Lu, Y, and Mattingly, JC. "Geometric ergodicity of Langevin dynamics with Coulomb interactions."

Mattingly, JC, Pillai, NS, and Stuart, AM. "Diffusion limits of the random walk Metropolis algorithm in high dimensions." *Annals of Applied Probability* 22.3: 881-930.

Heymann, M, Teitsworth, SW, and Mattingly, JC. "Rare Transition Events in Nonequilibrium Systems with State-Dependent Noise: Application to Stochastic Current Switching in Semiconductor Superlattices."

### **Conference Papers**

Mattingly, JC, and Suidan, TM. "Transition measures for the stochastic Burgers equation." 2008.

### **Other Articles**

Holmes, PJ, Mattingly, JC, and Wittenberg, RW. "Low-dimensional models of turbulence or, The dynamics of coherent structures." 19 (2001): 177-215.

### **PROFESSIONAL AWARDS AND SPECIAL RECOGNITION**

Fellow of the American Mathematical Society . American Mathematical Society. 2015

Simons Visiting Professor . MSRI. 2015

Institute of Mathematical Statistics Fellow. Institute of Mathematical Statistics. 2012

Faculty Early Career Development (CAREER) Program. National Science Foundation. 2005

Presidential Early Career Awards for Scientists and Engineers. National Science Foundation. 2005

Sloan Research Fellowship-Mathematics. Alfred P. Sloan Foundation. 2005

School of Mathematics/ Members. Institute for Advanced Study. 2002

### **PRESENTATIONS AND APPEARANCES**

#### **Invited Talks**

Interactions between noise and instabilities.. IHP, Paris. July, 2018

Quantifying Gerrymandering: A Mathematician Goes to Court. July, 2018

Quantifying Gerrymandering: A mathematician goes to court. UBC. May 2, 2018

Quantifying Gerrymandering: a mathematician goes to court. Stanford Mathematics Department. March 4, 2018

Ergodicity of Singular SPDEs. Columbia. May 2, 2018

Approximate/exact controllability and ergodicity for (additive noise) SPDEs/SODEs. CIRM, Marseilles . May 2, 2018

Discovering the geopolitical structure of the United States through Markov Chain Monte Carlo sampling. The Alan Turing Institute, UK. May 2, 2018

Ergodic and global solutions for singular SPDEs. Corvallis, Oregon. March 4, 2018

Drawing the line in redistricting (A mathematician's take). Stanford University. March 4, 2018

Anatomy of an ergodic theorem. Summer School. June 5, 2018

A mathematician Goes to Court. October 0, 2017

Stabilization of Stochastic Dynamics . UCLA. IPAM. January 0, 2017

Stochastic PDEs. July 5, 2016

Stabilization and noise. Berkley Mathematics Department. November 4, 2015

Stochastic PDEs. October 4, 2015

Ergodicity Finite and Infinite dimensional Markov Chains. McGill University. July 3, 2015

Dynamics Days 2014. Atlanta GA. January 6, 2014

Stabilization by Noise. November 2, 2013

Uniqueness of the inviscid limit in a simple model damped/driven system.. Probability and Mathematical Physics Seminar. November 2, 2013

Stochastic stabilization of OEDs.. Applied Math Seminar, NYU. September 5, 2013

Stochastic partial differential equations. SPA2013. August 4, 2013

Stabilization by noise. University of Maryland. May 3, 2013

Stabilization by Noise. Conférence en l'honneur d'Etienne Pardoux, CIRM, Marseillais France.. February 4, 2013

Perspectives on Ergodicity. Conference on SPDEs, IMA, Minnesota. January 1, 2013

A Numerical Method for the SDEs from Chemical Equations. Probability and Biology section, 2012 Canadian Mathematical society (winter meeting). December 6, 2012

Minerva Lectures: Ergodicity of Markov Processes: From Chains to SDEs to SPDEs. Mathematics Department, Columbia University. November 4, 2012

Stochastic Stabilization. Inria - Sophia Antipolis. July 0, 2012

A Menagerie of Stabilization. Joint Probability and Analysis Seminar, Nice, France. July 0, 2012

Building Lyapunov Functions (4 lectures). EPSRC Symposium Workshop – Easter Probability Meeting. March 4, 2012

Noise Induced Stability. MBI. February 3, 2012

A Menagerie of Stochastic Stabilization. CAMP/Probability Seminar, University of Chicago. October 2, 2011

A menagerie of stochastic stabilization. Equadiff 2011, Loughborough University. August 1, 2011

Coarse-graining of many-body systems: analysis, computations and applications. July 5, 2011

Ergodicity of systems with singular interaction terms. Stochastic Dynamics Transition Workshop, SAMSI. November 4, 2010

Oberwolfach Seminar: The Ergodic Theory of Markov Processes. Oberwolfach, Germany. October 5, 2010

Malliavin Calculus to prove ergodic theorems for SPDEs. ICM Satellite Conference on Probability and Stochastic Processes Indian Statistical Institute, Bangalore. August 5, 2010

SPDE scaling limits of an Markov chain Monte Carlo algorithm. Stochastic Partial Differential Equations: Approximation, Asymptotics and Computation, Newton Institute. June 1, 2010

The spread of randomness. German-American Frontiers of Science, Potsdam Germany. June 2, 2010

How to prove an ergodic theorem. oberwolfach. May 6, 2010

Coupling at infinity. Seminar on Stochastic Processes. March 2, 2010

Long time stochastic simulation. Imperial College. March 1, 2010

Spectral Gaps in Wasserstein Distance. Ergodic Theory Seminary, Princeton Mathematics. March 4, 2010

Trouble with a chain of stochastic oscillators. PACM, Princeton University. March 2, 2010

Hypo-ellipticity for SPDEs. SPDE program, Newton Institute. March 1, 2010

Numerics of SDEs. Warwick University, UK. February 3, 2010

Long Time Behavior of Stochastically Forced PDEs.. AMS Joint Meeting, San Francisco. January 4, 2010

Ellipticity and Hypo-ellipticity for SPDEs \*or\* What is ellipticity in infinite dimensions anyway?. Stochastic Partial Differential Equations, Newton Institute. January 5, 2010

SPDE Limits of the Random Walk Metropolis Algorithm in High Dimensions. SIAM PDE Meeting. December 1, 2009

Stochastic fluctuations in bio chemical networks. MBI: Mathematical Developments Arising from Biology. November 1, 2009

What makes infinite dimensional Markov processes different ?. Stochastic Process and Applications, Berlin. July 3, 2009

Introduction to Ergodicity in Infinite Dimensions. TU Berlin. July 3, 2009

Stochastically forced fluid equations: Transfer between scales and ergodicity.. AMS Sectional Meeting (invited talk). April 6, 2009

Trouble with a chain of stochastic oscillators. Princeton University. PACM. April 5, 2009

What makes the ergodic theory of Markov Chains in infinite dimensions different (and difficult) ?. Princeton Ergodic theory seminar. March 2, 2009

Ergodicity, Energy Transfer, and Stochastic Partial Differential Equations. Columbia University. Columbia University. December 1, 2008

The Spread of Randomness: Ergodicity in Infinite Dimensions. Mathematisches Forschungsinstitut Oberwolfach. December 1, 2008

The spread of randomness through dimensions. IPAM. November 6, 2008

The spread of randomness through dimensions. IPAM- Mathematical Frontiers in Network Multi-Resolution Analysis. November 6, 2008

Troubles with oscillators. Stanford: JBK85, Workshop on Applied Mathematics IN HONOR OF JOSEPH B. KELLER. October 3, 2008

What is different about the ergodic theory of stochastic PDEs (vs ODEs). UC Irvine, PDE and Probability Seminar. October 3, 2008

Trouble with a chain of stochastic oscillators. Stochastic Seminar, GaTech. September 1, 2008

Troubles with oscillators. East Midlands Stochastic Analysis Seminars. August 5, 2008

Troubles with chains of anharmonic oscillators. Statistical Mechanics working group. June 0, 2008

The spread of randomness in infinite dimensions and ergodicity for SPDEs. Stochastic Analysis, Random Fields and Applications, Asscona IT. June 0, 2008

Ergodicity of Degenerately forced SPDEs. Séminaire de Probabilités, Laboratoire de Probabilités et Modèles Aléatoires des Universités Pierre et Marie Curie et Denis Diderot. May 2, 2008

Ergodicity of Degenerately forced SPDEs. ETH, Zurich. May 4, 2008

### **Event/Org Administration**

Co-Organizer . Quantifying Gerrymandering. SAMSI. October 2018

Co-Organizer . Regional Gerrymandering Conference. November 2017

Co-Organizer . Interacting particle systems SEPC 2017. May 2017

Organiser Special Term. MSRI, Berkeley CA. August 2015 - December 2015

Organized invited session at SPA2013. August 2013

Co Organizer (with Amarjit Budhiraja ) : Seminar on Stochastic Processes 2013. March 2013

Local Organizer (with Rick Durrett) : Woman in Probability III. October 2012

SAMSI Stochastic Dynamics tradition workshop. November 2010

MFO week long school on ergodic theory. October 2010

SAMSI Opening Workshop for Stochastic Dynamics. August 2009

local liaison/Organizer SAMSI year on stochastic dynamics. 2009 - 2010

Organiser Special Term. MSRI, Berkeley CA. August 2007 - December 2007

### **Community Outreach**

Organizer . Discovering Research in Mathematics. 2011 - 2018