2012 NSF/CBMS Conference
Small Deviation Probabilities: Theory and Applications
June 4-8, 2012
Department of Mathematical Sciences
University of Alabama in Huntsville

Principal Lecturer

Each day the primary speaker, Dr. Wenbo Li, University of Delaware, will present two lectures. The purpose of these lectures is to present the state of the art of various powerful techniques on estimating small deviation probabilities, including traditional ones such as blocking, chaining, series expansions, Laplace/Taubirean theorems, classical Gaussian inequalities, Feynman-Kac formula, and newly developed ones such as metric entropy, weaker correlation and reverse Slepian type inequalities, determinantal approaches, etc. Major applications include strong limit theorems in probability and statistics, smoothness of density via Malliavin calculus, approximation quantities for stochastic processes, exit time and boundary crossing asymptotics, deviations for local times, lower tail behavior of Martingale limits for branching related processes, smallest singular values and Littlewood-Offer theory.

Complementary Talks
Xia Chen (University of Tennessee)  Frank Gao (University of Idaho)
Yaozhong Hu (University of Kansas)  Thomas Kühn (Universität Leipzig)
James Kuelbs (University of Wisconsin-Madison)  Michael Lacey (Georgia Institute of Technology)
Tai Melecher (University of Virginia)  Hoi Nguyen (University of Pennsylvania)
Yimin Xiao (Michigan State University)

Financial Support for Participants
Financial support for attending conference will be provided to about 25-30 participants. Established researchers as well as interested newcomers, postdoctoral fellows, and graduate students, are invited to attend. An online application and further information are available at: http://www.math.uah.edu/~cbms/

For more information, please contact the organizers:
Dr. Dongsheng Wu: dongsheng.wu@uah.edu  Dr. Kyle Siegrist: siegrist@math.uah.edu

Organized by: Department of Mathematical Sciences
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