

Sourav Chatterjee Awarded 2013 Loève Prize

The 2013 Line and Michel Loève International Prize in Probability is awarded to Sourav Chatterjee of the Courant Institute. The prize, which carries a monetary award of \$30,000, will be presented at a ceremony in Berkeley to be held in Fall 2013.

Chatterjee received his Ph.D. in 2005, advised by Persi Diaconis at Stanford University. His work has extraordinary breadth. On one side he has brought new ideas to bear upon classical topics – an extension of Lindeberg’s proof of the central limit theorem to an invariance principle for arbitrary smooth functions of weakly dependent random variables, a simpler proof of the famous KMT theorem on strong approximation of a random walk by Brownian motion, and a new version of Stein’s method, reducing a large class of normal approximation problems to variance bounding exercises. On another side he has taken up Talagrand’s *Challenge to Mathematicians* (to give rigorous analysis of spin glass models from statistical physics) by providing analyses of random overlap structures and showing that the Sherrington-Kirkpatrick model is chaotic under small perturbations of the couplings at any temperature in the absence of an external field. Other topics to which he has made substantial contributions include large deviations for random graphs and random matrices, first-passage percolation, and probabilistic methods for discrete nonlinear Schrödinger equations.

About the Prize. The Prize commemorates Michel Loève, Professor at the University of California, Berkeley, from 1948 until his untimely death in 1979. The Prize was established by his widow, Line, shortly before her death in 1992. Awarded every two years, it is intended to recognize outstanding contributions by researchers in probability who are under 45 years old.