

# Loeve Prize Celebration

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### About the Prize

*The Prize commemorates Michel Loeve, 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.*

### About the winner

ALICE GUIONNET received her Ph.D. in 1995, advised by Gerard Ben Arous. Her early research dealt with Langevin dynamics and aging in the Sherrington-Kirkpatrick model of spin glasses, and then with particle approximation to nonlinear filtering equations. Her best known work has been an extensive and wide-ranging treatment of large random matrices. Results include the full large deviation principle for the spectral measure of generalized Gaussian sample matrices, and concentration of the spectral measure in more general models.

### Schedule of Events

#### □ Monday October 26, 2009

3:10 – 4:00 Loeve Prize ceremony, 1011 Evans Hall. Includes presentation of award to Alice Guionnet, and non-technical talk about her work by Ofer Zeitouni

4:00 – 5:30 Reception. Womens Faculty Club. Open to all Dept members.

#### □ Tuesday October 27, 2009

4:10 – 5:00 Global Asymptotics for the Spectrum of Large Random Matrices, 60 Evans Hall Speaker: Alice Guionnet, Ecole Normale Supérieure de Lyon

I will survey recent results on the asymptotics of the spectrum of random matrices at a macroscopic scale. In particular, I will emphasize the role of free probability as a natural framework to study random matrices with size going to infinity. Applications will concern different models, going from the famous Wigner matrices to non-normal matrices, as recently studied by Krishnapur, Zeitouni and myself.