Stanford University  
Departments of Mathematics and Statistics

**Probability Seminar**

4:15pm, Monday, May 2, 2011
Sequoia Hall Room 200

Cookies served at 3:45pm, 1st Floor Lounge.

**Speaker:** Hamed Amini  
*Ecole Normale Superieure/INRIA, France*

**Title:** Epidemics and percolation in random networks

**Abstract:**

In the first part, we consider bootstrap percolation and diffusion in random graphs, and show how large cascades can be triggered by small initial shocks. We then analyze the impact of the edge weights on distances in sparse random graphs. Our main result consists of a precise asymptotic expression for the weighted diameter when the edge weights are i.i.d. exponential random variables.

This is joint work with Marc Lelarge.