

# The Oliver Club

[www.math.cornell.edu/~oliver/](http://www.math.cornell.edu/~oliver/)

**Qi-Man Shao**, Hong Kong University of Science and Technology

## ***Self-Normalized Large and Moderate Deviations***

*The theory of large and moderate deviations is a cornerstone of both pure and applied probability. In the classical setting, the normalizing constants are deterministic and the moment assumptions on the probability distributions are very restrictive. However, the situation becomes very different when the normalizing constants are randomized.*

*A self-normalized large deviation theorem holds without any moment assumptions, and a self-normalized Cramér type moderate deviation result remains valid under a minor moment condition. In this talk we will discuss and survey recent developments on self-normalized large and moderate deviations and their applications.*



**Thursday, November 3, 2011**  
**at 4:00 PM in 532 Malott Hall**

Refreshments will be served at 3:30 PM in the Mathematics Department lounge (532 Malott Hall).