



COMMITTEE ON  
APPLIED &  
THEORETICAL  
STATISTICS

Announcing a *Joint Seminar* of the **Committee on Applied and Theoretical Statistics** and the **Committee on National Statistics** of *The National Academies*...

# THE STORY OF THE Netflix Prize

**Friday, November 4, 2011 • 3:00–5:00 pm**

*Reception to Follow*



Keck Center of the National Academies, Room 100  
500 Fifth Street NW  
Washington, DC 20001



**Robert Bell**  
AT&T Labs Research



**Lester Mackey**  
University of  
California, Berkeley



**Emmanuel Candes**  
Stanford University

Just over five years ago, Netflix released more than 100 million movie ratings as part of a data analysis contest to improve methods for recommending movies to customers based on ratings they had provided for previously rented movies. A prize of \$1 million was offered for a “recommender” algorithm that outperformed the existing Netflix system Cinematch<sup>SM</sup> by at least 10% in terms of root mean squared prediction error. In a textbook example of “crowdsourcing,” more than 20,000 teams from over 150 countries submitted algorithms. By August 2009, after almost three years of effort, two teams, BellKor’s Pragmatic Chaos and The Ensemble, had surpassed the 10% goal in a finish worthy of its own movie.

Bob Bell (*BellKor’s Pragmatic Chaos*) and Lester Mackey (*The Ensemble*) will describe the overall set-up of the competition, the challenges it posed, the main ideas underlying their recommender algorithms, and the interaction among the leading competitors. Emmanuel Candes will then discuss the research avenues stimulated by the various algorithms developed in this competition, some of the resulting advances, and some difficult problems that remain.

**— Open to the Public • Please RSVP! —**

*For planning and building check-in purposes, please RSVP by **October 31** to Agnes Gaskin at [agaskin@nas.edu](mailto:agaskin@nas.edu) or (202) 334-3096.*