## The Charles Phelps Taft Research Center and the Department of Mathematical Sciences

Present

## **Professor Persi Diaconis**

Mary V. Sunseri Professor of Statistics and Mathematics, Stanford University

Member of the National Academy of Sciences

## On Coincidences

Thursday, August 30, 2012 Rm 3210 Recreation Center, 4 – 5 pm

Coincidences astound us. They can affect who we live with and what we work at. I will review work of Jung and Freud. Sometimes, a bit of quantitative thinking can show that things are not so surprising after all.

## On Adding a List of Numbers (and Other Determinantal Point Process)

Friday, August 31, 2012 Room 819 Swift Hall, 4 – 5 pm

When a column of digits is added in the usual way, carries accrue along the way. Investigating the distribution of carries (about how many? Are they correlated?) leads to all kinds of mathematics: random matrix theory; group cohomology; and Koszul algebras. This talk, based on joint work with Alexei Borodin and Jason Fulman, will be a friendly introduction to these topics.

