

## Department of Mathematics Outstanding Alumnus Seminar

THURSDAY, SEPTEMBER 22, 2016

4:30 p.m.

**MATH 175** 

Refreshments will be served at 4:00 p.m. in the MATH Library Lounge

## Sheldon M. Ross

## Professor of Mathematics University of Southern California

Friendship Paradoxes and a Friendship Model

We first discuss the friendship paradox, which is often expressed as "your friends tend to have more friends than you do". We give the standard version and then obtain some generalizations and extensions. We then discuss a general probability model for a friendship graph. The model supposes that each individual has a randomly determined value, that that the probability that two individuals are friends is given by a function of their values.