Stanford University
Departments of Mathematics and Statistics

PROBABILITY SEMINAR

4pm, Monday, February 26, 2018
Sequoia Hall Room 200
Refreshments served at 3:30pm in the Lounge.

Speaker: Wenpin Tang, UCLA

Title: Regenerative permutations: Mallows($q$) and Riemann zeta formulas

Abstract:

In this talk we discuss regenerative permutations on integers, with emphasis on two particular models: $p$-shifted and $P$-biased permutations. When $p$ is the geometric distribution, the $p$-shifted permutations appear to be the limit of a Mallows permutation model. We generalize and simplify previous work of Gnedin and Olshanski. The $P$-biased permutations are reminiscent of successive sampling in Bayesian statistics. Interestingly, some zeta formulas appear in the evaluation of renewal quantities of GEM-biased permutations.

This is based on joint work with Jean-Jil Duchamps and Jim Pitman.