

Stanford University
Departments of Mathematics and Statistics

PROBABILITY SEMINAR

4pm, Monday, November 4, 2019
Sequoia Hall Room 200

Refreshments served at 3:30pm in the Lounge.

Speaker: Matthew Kwan, *Stanford Mathematics*

Title: **Combinatorial anti-concentration inequalities**

Abstract:

Consider a degree- d polynomial $f(\xi_1, \dots, \xi_n)$ of independent Bernoulli random variables. What can be said about the concentration of f on any single value? This generalises the classical Littlewood–Offord problem, which asks the same question for linear polynomials. In this talk we discuss a few recent results in this area, focusing on combinatorial aspects.

This is joint work with Jacob Fox and Lisa Sauermann.