

Simple Person's Applied Math Seminar

Flavor: Small Deviations, by Vishesh Jain

Ingredients: Let X_1, ... X_n be independent non-negative random variables, each with mean 1. What is the probability that X_1 + ... + X_n exceeds n+1? I will discuss a very simple proof (due to Nazarov) of a remarkable inequality by Feige, which shows that this probability is bounded away from 1 by an absolute constant. Time permitting, I will discuss an application of this inequality to a problem in extremal hypergraph theory.

Best Before: April 4th 2019, 6-7pm, in Room 2-132

Please visit <u>https://math.mit.edu/spams</u> for detailed nutrition information for SPAMS.

Glorio