

STANFORD PROBABILITY SEMINAR

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Monday, 24 October 2005

4:15pm (Refreshments at 4pm in the 1st Floor Lounge)

Sequoia Hall, Room 200

Random matrices and infinitesimal rotations

Abstract. A theme in studying random matrices from the classical groups is that Haar-distributed matrices are close to Gaussian matrices in many ways; one way is that linear functions of random orthogonal matrices are asymptotically normally distributed (as the dimension approaches infinity). I will discuss an infinitesimal version of Stein's method, introduced by Stein in 1995, which can be used to obtain a rate of convergence in this and related theorems.