

**Alexander Gamburd** (Stanford):

*Random Matrices and Magic Squares*

*Abstract:* Characteristic polynomials of random unitary matrices have been intensively studied in recent years: by number theorists in connection with Riemann zeta-function, and by theoretical physicists in connection with Quantum Chaos. In particular, Haake and collaborators have computed the variance of the coefficients of these polynomials and raised the question of computing the higher moments. The answer, obtained in recent joint work with Persi Diaconis, turns out to be intimately related to counting integer stochastic matrices (magic squares).