$\mathbf{T}_{\text{EMPLE}} \; \mathbf{U}_{\text{NIVERSITY}} \; \mathbf{M}_{\text{ATHEMATICS}} \; \mathbf{C}_{\text{OLLOQUIUM}}$

Alex Lubotzky

Hebrew University of Jerusalem

will speak on

Counting representations of arithmetic groups

ABSTRACT: Given a higher rank arithmetic group (e.g. $SL(3,\mathbb{Z})$) it has r(n) complex irreducible representations of degree n. We will study the the rate of growth of r(n), the associated zeta function $\sum_{n} r(n)n^{-s}$, its Euler factorisation etc. Some connections with subgroup growth, congruence subgroup property and super-rigidity will be shown. (Based on joint works with B. Martin and with M. Larsen).

Monday, January 30, 2006 Lecture at 4:00 PM (#) Coffee, tea, and refreshments from 3-5 PM. Room 617, Wachman Building Department of Mathematics