COLLOQUIUM UNIVERSITY OF PITTSBURGH FRIDAY, OCTOBER 26, 2007

704 THACKERAY HALL 4:00 P.M.

PROFESSOR MARK SAPIR

DEPARTMENT OF MATHEMATICS VANDERBILT UNIVERSITY

TITLE: HILBERT SPACE COMPRESSION
OF GROUPS AND GRAPHS

ABSTRACT: The Hilbert space compression of a metric space measures the optimal distortion of an embedding of the metric space into a Hilbert space. The concept was introduced by Guentner and Kaminker, it is related to amenability, exactness of C^* -algebras, the Novikov conjecture, etc. This concept has been studied by computer scientists as well. I will mostly talk about results obtained jointly with G. Arzhantseva, C. Drutu and V. Guba.

Refreshments served at 3:30 p.m. in the Math Dept. COMMON ROOM, Thackeray 705