## $T_{\text{EMPLE}}\,U_{\text{NIVERSITY}}\,G_{\text{EOMETRY}}\,S_{\text{EMINAR}}$

## Chris Atkinson

University of Illinois, Chicago

will speak on

## Volume estimates for hyperbolic Coxeter polyhedra

ABSTRACT: I will give two-sided volume estimates for various hyperbolic polyhedra with all dihedral angles either  $\pi/2$  or  $\pi/3$  in terms of the combinatorics of the 1–skeleton. As an application of these estimates, I'll explain how they can be used along with ideas which contribute to the proof of the Orbifold Theorem to give a lower bound on the volume of an arbitrary hyperbolic Coxeter polyhedron.

Tuesday, 17 February 2009
Lecture at 2:40 pm
Coffee, tea, and refreshments from 3:30–5 pm
Room 617, Wachman Building
Department of Mathematics