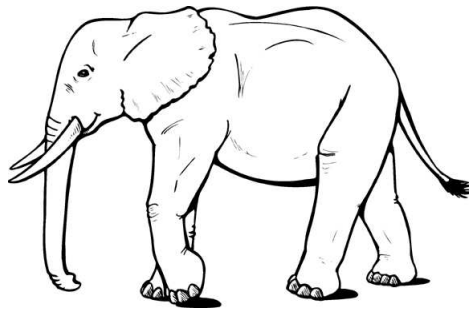# SPECIAL MATH CLUB LECTURE

5:00 PM, 25 October 2007, 232 Lockett Hall

The Cauchy-Schwarz Inequality or...
If the Elephant is Fat, then There Must Be a Way
to Place a Mirror to Make This Obvious...

Professor Alex Iosevich
Department of Mathematics
University of Missouri-Columbia

Abstract: We use the Cauchy-Schwarz inequality to see that if the set occupied by the elephant in three dimensions has large volume, then at least one of its projections onto the coordinate planes has a large area. We then explore a similar question in higher dimensions, encountering fascinating analytic and combinatorial objects along the way.

Biography of Speaker: The speaker got his B.S. in mathematics at the University of Chicago in 1989 and a Ph.D. from UCLA in 1993 under the direction of Chris Sogge. He held a postdoctoral position at McMaster from 1993-95, a tenure track position at Wright State University from 1995-1998, and a tenure track and then a tenured position at Georgetown from 1998-2000. He then moved to the University of Missouri where he is now a Professor of Mathematics. In addition to math, the speaker spends way too much of his time reading about the history of medieval Europe.

All undergrads and first year grads invited. Refreshments will be provided.