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

Paul E. Schupp

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will speak on

Genericity and Randomness in Geometric Group Theory

ABSTRACT: This talk will be an introduction to the ideas mentioned in the title for a general mathematical audience.

The concept of "generic" or "random" behavior, long important in many areas of mathematics, now plays a major role in geometric group theory. The initial impetus was Gromov's remark that "most" finitely presented groups are hyperbolic. In the context of group theory there is a very simple definition of what it means to be "generic" and this concept operates at many different levels. Do finitely presented groups generically have a certain algebraic property \mathcal{P} ? For a fixed group G, are the finitely generated subgroups generically of a certain kind? Again for a fixed group G, do elements generically have a certain property?

> Monday, November 21, 2005 Lecture at 4:00 PM (\$) Coffee, tea, and refreshments from 3-5 PM. Room 617, Wachman Building Department of Mathematics