

SPECIAL COLLOQUIUM

Gabriel Picioroaga

will present

The Richard Thompson Group F

3:30 pm

Thursday, February 24th

Violette Hall 1228

Abstract: The Thompson group F can be regarded as the group of piecewise-linear, orientation-preserving homeomorphisms of the unit interval which have breakpoints only at dyadic points and on intervals of differentiability the slopes are powers of two. The group was discovered in the 60's by Richard Thompson and it led to the construction of the first example of a finitely presented infinite simple group. Since then, the chameleonic F has received considerable attention in such fields as homotopy theory or operator algebras.

In this talk we will give two equivalent definitions of F and also explain its fractal nature. We will also point out the importance of a still open problem in group theory and the expectation that F could be the one to solve it.

Gabriel Picioroaga is a graduate student at the University of Iowa. This talk is sponsored jointly by the SMACS program and the Heartland Mathematics Partnership.

Cookies and Refreshments!!!