General Interest Seminar

Title: New invariants of Thompson's group F

Speaker: Professor Ross Geoghegan (SUNY, Binghamton)

Date: Mon 26th May 2008 at 4:00PM

Location: Mathematical Sciences Seminar Room

Abstract: This talk is about the Thompson group F, the group of all PL dyadic increasing homeomorphisms of the closed unit interval. This fascinating (finitely presented!) group has relevance in a number of areas of mathematics, and has been widely studied in recent years. I will describe properties of F which lead to the following Theorem: it For each $n geq 0$ there is a subgroup of F of type FP_n which is not of type FP_{n+1}. (The FP properties of a group are the "homological finiteness properties"; FP_1 is "finitely generated", etc.) The proof involves the Bieri–Neumann–Strebel–Renz invariants of groups; these will be introduced and discussed, along with some other features of F. This is joint work with Robert Bieri and Dessislava Kochloukova.