

Speaker: Chris Conidis
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Thursday, April 17, 2008
2:00 pm
356 Fitzpatrick Hall

Title: Classifying Model-Theoretic Properties

Abstract:

A set A is prime bounding if for any complete atomic decidable theory T , there is a model of T decidable in A . In 2004, Csima, Hirschfeldt, Knight, and Soare [CHKS] examined nine seemingly unrelated predicates of a set A , one of which is the predicate " A is prime bounding". The authors showed that the predicates are mutually equivalent for Δ_2^0 sets (in other words, if A is Δ_2^0 , then A satisfies one of the predicates if and only if A satisfies them all). Building on the results of [CHKS], we shall examine the case when A is not Δ_2^0 . In particular, we will show that five of the nine predicates are equivalent for all sets A .