Speaker: Rebecca Steiner

Title: Automorphism Spectra of Size 2ⁿ-1

Abstract: The automorphism spectrum of a structure is the set whose elements are the Turing degrees of the nontrivial automorphisms of the structure.

It has been shown that if d_1 and d_2 are incomparable degrees, then there is no computable structure with automorphism spectrum {d₁, d₂}. It has also been shown that there exist pairwise incomparable degrees d₁, d₂, and d₃ and a computable structure with automorphism spectrum {d₁, d₂, d₃}.

We show that there exist pairwise incomparable degrees d_1, d_2, \ldots, d_7 and a computable structure with automorphism spectrum $\{d_1, d_2, \ldots, d_7\}$.

If time permits, we attempt a generalization.