

University of Notre Dame Department of Mathematics

LOGIC SEMINAR

Rebecca Steiner

Queens College, CUNY

Will give a lecture entitled:

Effective Algebraicity

On

Thursday, February 17, 2011

At

2:00 PM

In

258 Hurley Hall

Abstract

In 2009, R. Miller proved several results about computable algebraic fields and computable categoricity. Also in 2009, A. Frolov, I. Kalimullin, and R. Miller proved some results about the degree spectrum of a computable algebraic field when viewed as a subfield of its algebraic closure. Here, we show that the same computable categoricity results also hold for computable finite-branching trees under the predecessor function and computable, connected, finite-valence graphs, and we show that the degree spectrum results do not hold for these trees and graphs. We also offer an explanation for why the degree spectrum results distinguish these classes of structures.