



Speaker: Nicholas Ramsey
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Tuesday, November 14, 2017

2:00 PM

125 Hayes-Healy Hall

Title: Examples of NSOP₁ Theories

Abstract:

The theory of Kim-independence, which we developed in joint work with Itay Kaplan, gives a theory of independence that works well in NSOP₁ theories and that generalizes non-forking independence over models in simple theories. As a generalization of simplicity to a broader context, the proofs only get harder and the theorems only get worse, so one hopes that the added generality allows one to treat interesting new examples that exhibit new phenomena. I'll give an overview of the basic theory and survey the known examples, ranging from algebraic examples (PAC fields and classical geometries over NSOP₁ fields), generic constructions (parametrization, expansion, and Skolemization), and continuous logic (randomization of NSOP₁ theories). Particular emphasis will be given on our joint work on generic constructions of NSOP₁ theories with Alex Kruckman.