## REED SOLOMON, University of Connecticut

Relatively decidable theories

A computably enumerable theory T is relatively decidable if for every countable model of T, the elementary diagram is computable from the atomic diagram. In this talk, I will discuss joint work with Jennifer Chubb and Russell Miller about relatively decidable theories and about the uniform version of this property. Recently, Matthew Harrison-Trainor has disproved a conjecture characterizing relatively decidable theories by showing that the index set for these theories is  $\Pi^1_1$  complete.