

January 16, 4:05 p.m. (9^{th} Period) (in the Atrium)

Speaker: John Hester

Title: Refutational Completeness of Paramodulation

Abstract

The Paramodulation Calculus is a collection of inference rules for clauses of first order logic based on resolution. It is used in today's most successful automated first order theorem provers, such as E and Vampire. In the talk, I will introduce a restricted variant of the Paramodulation Calculus for ground Horn clauses (clauses with only one positive literal and no variables) and prove its refutation completeness. In other words, any collection of clauses closed under the Paramodulation Calculus that does not contain the empty clause, which denotes contradiction, has a model.

Social Afterward: Leaving Little Hall at 5:00 p.m. The Social at Midtown