NATE ACKERMAN, Harvard University

A Counterexample to the Infinitary Vaught Conjecture

The infinitary Vaught conjecture is the statement that every sentence of $L_{\omega_1,\omega}$ (in a countable language) has either countably many our continuum many countable models. This is equivalent to the statement that any Borel action of S_∞, the permutation group of the unique countably infinite set, has countably or continuum many orbits. In this talk I will discuss a counterexample to the infinitary Vaught conjecture.

This is joint work with Cameron Freer and Robin Knight.