Vaught conjecture for binary weakly o-minimal theories

Slavko Moconja

Abstract

In the talk we will discuss Vaught conjecture for binary weakly o-minimal theories, as well as some generalizations.

Every non-algebraic type in a weakly o-minimal theory has two global invariant completions. If we in addition assume binarity, these global invariant completions are regular in the sense of Pillay and Tanović, and furthermore, they induce an invariant of models. We discuss how these invariants are used in order to describe models up to isomorphism. As an application we obtain that Vaught conjecture holds for binary weakly o-minimal theories.

We present joint work with Predrag Tanović.