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Degrees of Categoricity on a Cone

A degree of categoricity is, roughly speaking, the Turing degree of difficulty of computing isomorphisms between all computable copies of a given computable structure. Not all computable structures have a degree of categoricity, and we do not have a characterization of which Turing degrees are degrees of categoricity. In this talk, we discuss the notion of a structure having a degree of categoricity on a cone, that is, having a cone in the Turing degrees where the structure has a degree of categoricity relative to every degree in the cone. When we look at degrees of categoricity on a cone, the strange behavior disappears.