

Talk Title: The importance of being Rigid

Abstract: An object in a category is said rigid if its group of automorphisms is trivial. We work in HoTop, the homotopy category of simply-connected spaces. Furthermore, we ask the spaces to be rational (or equivalently, to be differential graded algebras over the rationals). Being both rigid and rational is quite rare, and examples are relatively recent in literature. In this talk we will illustrate how these examples are key tools to solve classical problems in Algebraic Topology and Differential Geometry.

This is a joint work with Vicente Muñoz and Antonio Viruel.