Simona Paoli (Leicester)

Higher structures in homotopy theory and category theory

Abstract

Higher categorical structures find applications to diverse areas, such as homotopy theory, mathematical physics, logic and computer science, algebraic geometry. In this talk I will give an introduction to higher categories and to some of their connections with homotopy theory. I will then discuss a novel approach to weak n-categories, based on iterated internal categories and on the notion of weak globularity.