

TOPOLOGY SEMINAR

Operads and their nerves

By Redi Haderi (Bilkent)

Abstract: Like many categorical structures, operads were first introduced as an organizing principle in algebraic topology (more precisely in the study of loop spaces). Roughly speaking, an operad keeps track of abstract operations of various arities and their compositions. Like many categorical structures, it turns out they serve as an organizing principle which is recognizable in many other fields. For example, they are generalizations of monoidal categories. Recently, there is increasing interest in homotopy coherent operad theory.

We will give a brief general introduction to the subject. Then we will share some results from our recent joint work with Ozgun Unlu, which consist of a nerve construction leading to a notion of infinity-operad.

Date: Monday, November 14, 2022 Time: 13:30 Place: SA141 Mathematics Seminar Room