TOPOLOGY SEMINAR

Higher order Toda brackets

By

Aziz Kharoof
(University of Haifa)

Abstract: Toda brackets are a type of higher homotopy operation. Like Massey products, they are not always defined, and their value is indeterminate. Nevertheless, they play an important role in algebraic topology and related fields: Toda originally constructed them as a tool for computing homotopy groups of spheres. Adams later showed that they can be used to calculate differentials in spectral sequences.
After reviewing the construction and properties of the classical Toda bracket, we shall describe a higher order version, there are two ways to do that. We will provide a diagrammatic description for the system we need to define the higher order Toda brackets, then we will use that to give alternative definition using the homotopy cofiber.

Date: Mar 22, 2021
Time: 13:30 UTC+3
Place: Zoom

To request the event link, please send a message to cihan.okay@bilkent.edu.tr