



TOPOLOGY SEMINAR

“On the space of commuting n -tuples in a Lie group”

By

Simon Gritschacher
(University of Copenhagen)

Abstract: The space of n -tuples of pairwise commuting elements in a compact Lie group G can be identified with a moduli space of flat G -bundles over the n -torus. Borel, Friedman, and Morgan studied spaces of commuting pairs and triples to answer questions arising in mathematical physics. Often the focus lies on the enumeration of connected components, but little is known about their higher homotopy and homology groups. In this talk I will describe the second homology group of the space of commuting pairs in any connected Lie group. Some results about n -tuples for $n > 2$ in groups of type A or C are also obtained. This is joint work with Alejandro Adem and Jose Manuel Gomez.

Date: 2 November 2020

Time: 13:40

Place: Zoom

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