



TOPOLOGY SEMINAR

Simple homotopy invariance of the loop coproduct

By

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Abstract: String topology provides algebraic operations on the homology of a free loop space of a manifold introduced by Chas and Sullivan. While the loop product was known to be homotopy-invariant for a long time, Sullivan conjectured that the loop coproduct is not homotopy-invariant. I will explain a recent proof due to Naef and myself (with related work by Kenigsberg and Porcelli) that the failure of the loop coproduct to be homotopy-invariant is given by the trace of the Whitehead torsion from simple homotopy theory.

Date: May 19, Monday, 2025

Time: 13:30

Place: ZOOM

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