



TOPOLOGY SEMINAR

Hypergraph homology and its applications

By

Jie Wu

(Hebei Normal University)

Abstract: In practical applications, hypergraph is considered as the most general mathematical model for network beyond pairwise interactions. From topological views, the notion of hypergraph is a generalization of simplicial complex. In this talk, we will explain how to naturally extend simplicial homology theory to a homology theory on hypergraphs so that algebraic topology admits broader applications in practice. As applications in data science, we will present hypergraph-based persistent cohomology (HPC) for molecular representations in drug design.

Date: 18 October, 2021

Time: 13:30 UTC+3

Place: Zoom

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