



TOPOLOGY SEMINAR

Persistence modules and the interleaving distance

By

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Abstract: In topological data analysis, a persistence module is obtained with applying homology with coefficients in some fixed field to the increasing family of topological spaces or complexes. The distance between two persistence modules can be measured with the interleaving metric. The collection of persistence modules with the interleaving metric fails to be a topological space since it is not a set but a class. For this, one can restrict oneself to the identified sets together with the topology induced by the interleaving distance in order to study their basic topological properties. In this talk we are going to discuss persistence modules, the interleaving distance and the topological properties of the considered sets of persistence modules induced by the interleaving distance.

Date: 11 October, 2021

Time: 15:30 UTC+3

Place: Zoom

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