

On topology of spaces of persistence diagrams

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Abstract: In Topological Data Analysis, the persistence diagrams are used for visualizing the persistence homology. There are natural metrics on the set of (generalized) persistence diagrams, e.g., Wasserstein metrics and the bottleneck metric. The aim of the talk is to describe the topology of the metric spaces of persistence diagrams. We also introduce a non-metrizable topology on the set of persistence diagrams.