BI-CO MATHEMATICS COLLOQUIUM

Soheil Anbouhi

Haverford College

"Universal Mappings and Analysis of Functional Data on Geometric Domains"

Monday, November 14, 2022
Talk at 4:00 – Park 338
Tea at 3:30 – Park 361, Math Lounge

Abstract:
Functional data are data in the form of functions recorded on geometric domains. For example, in a functional magnetic resonance image (fMRI), the blood-oxygen-level-dependent can be thought of as a function defined on the (structural) brain network. In a broader sense, the labels defined on the nodes of a network could be represented as a function defined on the metric space of nodes, where the shortest path distance gives the metric. In this talk, I will discuss how we can model and analyze such objects using tools from areas such as metric geometry and optimal transport theory.

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