Active Learning of Partitions via Same-Cluster Oracle

TUESDAY, February 21st
12:30pm
Jones Laboratory, Room 303

ABSTRACT

Learning cluster structure is a fundamental task in Machine Learning. In this talk, we focus on partitioning a finite set. We consider the active setting in which one gains information about the clusters exclusively by asking potentially expensive questions of the form: "Are u and v part of the same cluster?" The main question of interest is: how many queries are needed to guarantee full recovery of the underlying partition. We will discuss what is known about this problem as well as recent extensions to the error-tolerant setting.