



INDIAN STATISTICAL INSTITUTE

203 B.T. Road, Kolkata-700108

Theoretical Statistics and Mathematics Unit

Monday Colloquium

Date: June 03, 2024

Time: 04:15 P.M.

Venue: L-infinity, Stat-Math Unit (5th Floor, A.N. Kolmogorov Bhavan), ISI Kolkata

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TITLE:

Generalization error of min-norm interpolators in transfer learning

ABSTRACT:

Recent advancements in machine learning have shown that overfitting can yield remarkably effective results. In the overparameterized regime, complex models that achieve zero-training error (i.e., the model interpolates the data) have become increasingly popular. However, the behavior of min-norm interpolators when data is collected across multiple sources is not well understood. In this talk, we will discuss how to characterize the precise generalization error for min-norm interpolators when there is heterogeneity across different sources. We consider both covariate and model shifts and provide analytical and numerical examples to demonstrate how heterogeneity among sources can benefit the statistician. This is joint work with Yanke Song and Pragma Sur.

ALL ARE CORDIALLY INVITED