TOPIC: A Tale of Three Regression Problems
SPEAKER: Alexander Rakhlin (UPenn)
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Abstract

We consider the problem of regression in three scenarios: (a) random design under the assumption that the model F is correctly specified, (b) distribution-free statistical learning with respect to a reference class F; and (c) online regression with no assumption on the data-generation process. The first problem is often studied in the literature on nonparametric estimation, the second falls within the purview of statistical learning theory, and the third is studied within the online learning community. But do these three problems really differ from the minimax point of view? This question will be addressed in the talk.

(Joint work with Karthik Sridharan and Sasha Tsybakov)

Bio

Alexander Rakhlin is an Associate Professor at the Department of Statistics and the Department of Computer and Information Science (secondary) at the University of Pennsylvania. He received his bachelors degrees in Mathematics and Computer Science from Cornell University, and doctoral degree from MIT. He was a postdoc at UC Berkeley EECS before joining UPenn. His research is in machine learning, with an emphasis on statistics and computation.