Accelerated computation and minimax rate of kernel Stein discrepancy*

Zoltán Szabó†

Abstract

Kernel Stein discrepancies (KSDs) are among the most powerful tools to quantify goodness-of-fit, with numerous successful applications. The aim of these talks is to understand the computational-statistical tradeoffs of KSD estimation: the first talk will focus on an accelerated scheme while preserving the statistical accuracy of the classical quadratic-time KSD estimator; the second presentation will establish the optimal rate at which KSD can be estimated.

*Faculty of Engineering, Free University of Bozen-Bolzano, Italy (Feb. 23 and 25, 2026); abstract.

†Part-1 is joint work with Florian Kalinke and Bharath K. Sriperumbudur; paper; Part-2 is joint work with Jose Cribeiro-Ramallo, Agnideep Aich, Florian Kalinke, and Ashit Baran Aich; paper.