Abstract

Oberwolfach Workshop:

Stein's Method in Stochastic Geometry, Statistical Learning, and Optimisation

Dates:

24 Aug - 29 Aug 2025   (Code: 2535b)

Organizers:

Krishnakumar Balasubramanian, Davis
Murat A. Erdogdu, Toronto
Larry Goldstein, Los Angeles
Gesine Reinert, Oxford

Stein's method, a powerful tool rooted in probability and stochastic analysis, has recently showcased its efficacy in addressing diverse challenges encountered in deep learning, optimisation, sampling, and causal inference. The primary focus of the workshop is to strengthen the probabilistic and analytic foundations of Stein's method, while simultaneously exploring novel avenues for its application. Bringing together researchers from the analysis, probability, statistics, and machine learning communities, who share a common interest in Stein's method, the workshop aims to facilitate the exchange of ideas, tackle open problems, and foster collaborations to advance the forefront of knowledge in these fields. Of particular importance is the emphasis placed on the intersection of these disciplines, where Stein's method plays a pivotal role.