



复旦大学数学科学学院 数学综合报告会

报告题目: Implicit Bias in DNN-based PDE Solvers

报告人: 罗涛 (上海交通大学)

时间: 2025-05-23 星期五 10:30-11:30

地点: 光华楼东主楼 1801

报告摘要:

In this talk, we first introduce the concept of implicit bias in deep learning. We then discuss the implicit biases present in commonly used neural network-based PDE solvers, offering new insights into the optimization and generalization of these algorithms. Finally, we present some data-driven approaches for solving multi-scale PDE problems and discuss the associated issues of implicit bias, optimization, and generalization.

非线性数学模型与方法教育部重点实验室
中法应用数学国际联合实验室
上海市现代应用数学重点实验室
复旦大学数学研究所