



复旦大学数学科学学院 数学综合报告会

报告题目: Adjoint Sobolev embedding operators and their connection to inverse problems

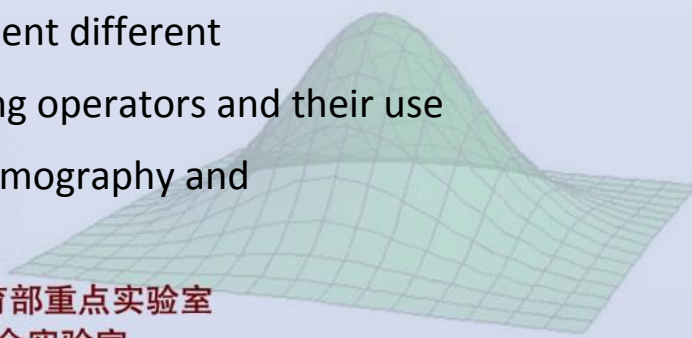
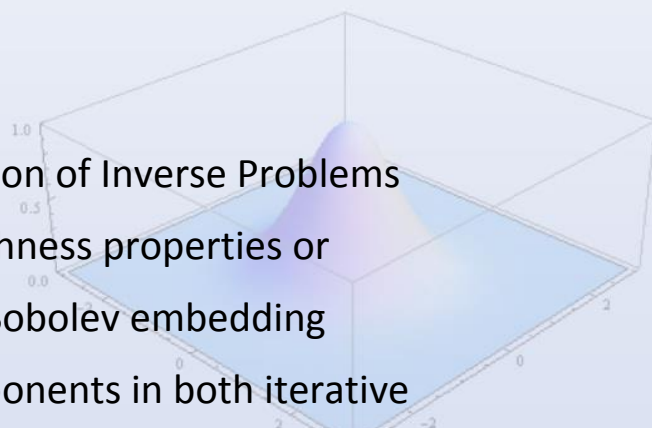
报告人: Ronny Ramlau (RICAM, Austria)

时间: 2025-11-19 星期三 13:30-14:30

地点: 光华楼东主楼 1601

报告摘要:

Sobolev Spaces are useful for the formulation of Inverse Problems as well as the incorporation of, e.g., smoothness properties or statistics of their solution. As a result, the Sobolev embedding operator and its adjoint are common components in both iterative and variational regularization methods for the computation of a solution. However, while the embedding operator itself is trivial, its adjoint is typically not, and the study of its properties and different representations is of importance both theoretically and practically. Hence, in this talk we will present different characterizations of the adjoint embedding operators and their use in standard Tomography, Atmospheric Tomography and Photoacoustic Tomography.



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