



深圳北理莫斯科大学

УНИВЕРСИТЕТ МГУ-ППИ В ШЭНЬЧЖЭНЕ
SHENZHEN MSU-BIT UNIVERSITY

应用数学讲座

Научный Семинар по Прикладной Математике

Research Seminar on Applied Mathematics

应用数学报告（42）

报告人 / Докладчик / Speaker: 王彦飞 研究员

题目 / Название / Title: Inverse problems in geophysics and the related solution methods

时间 / Время / Time: 9 Jul. 2022, 13:00-17:00

地点 / Место / Venue: 主楼 336

摘要 / Аннотация / Abstract:

In this talk, I address about inverse problems in geophysics and the related solution methods. Generally, inverse problems are ill-posed in the sense that one of the three items “existence, uniqueness or stability” of the solution may be violated. In geophysics, nearly all inverse problems are ill-posed because of the limitations of observations and instability during inversion computation. Big data and artificial intelligence (AI) are hot topics in recent years. In this talk, I also formulate the related problems in big data and AI as some kinds of inverse problems. Mathematical modeling and related solving methodology are given. Several case studies are performed and interpreted.

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王彦飞研究员任中国科学院油气资源研究重点实验室主任，地球科学大数据与人工智能中心主任，大数据分析方法与智能计算学科组组长。2013年获国家杰出青年科学基金资助。2016年获国家自然科学基金重大研究计划项目资助。2018年获国家重点研发计划项目资助。