



复旦大学数学科学学院 数学综合报告会

报告题目: Optimal regularized hypothesis testing in statistical inverse problems

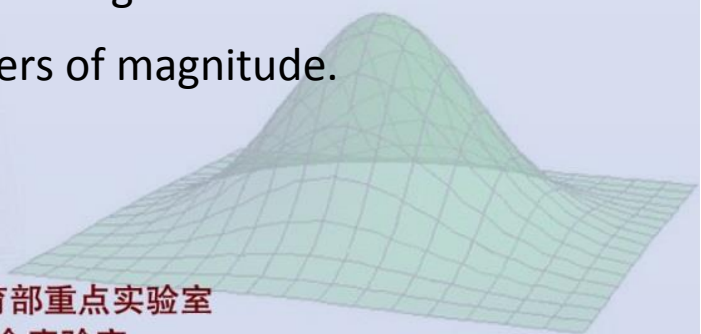
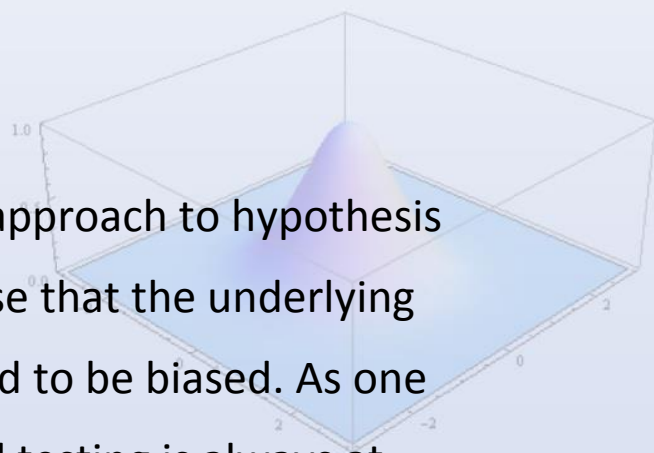
报告人: Frank Werner (University of Würzburg)

时间: 2025-10-29 星期三 13:30-14:30

地点: 光华东主楼1601

报告摘要:

In this talk, we propose a regularized approach to hypothesis testing in Inverse Problems in the sense that the underlying estimators or test statistics are allowed to be biased. As one major result we prove that regularized testing is always at least as good as classical unregularized testing. We furthermore provide an adaptive test by maximizing the power functional, which outperforms unregularized tests in numerical simulations by several orders of magnitude.



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