



## 复旦大学数学科学学院 数学综合报告会

报告题目: Square function and local smoothing estimates for Fourier integral operators

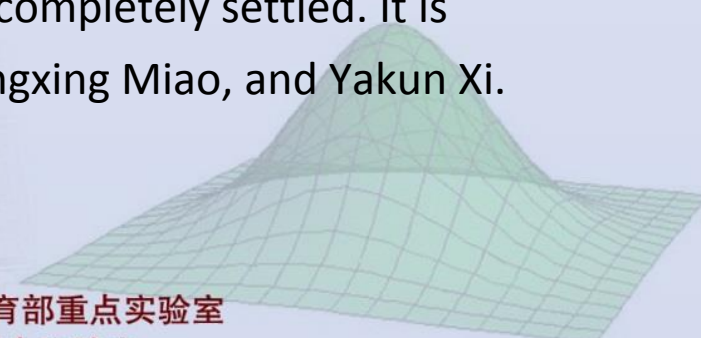
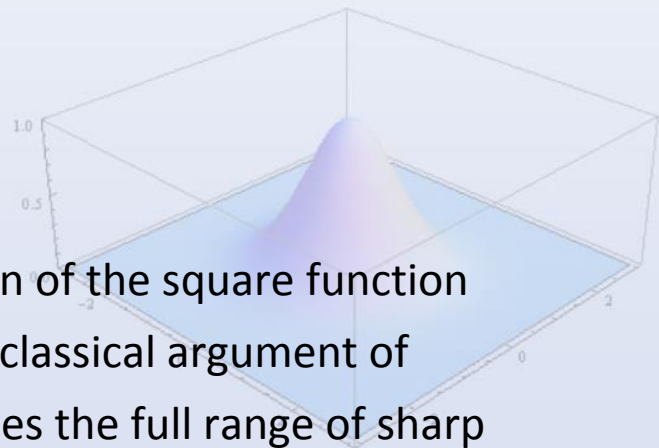
报告人: 刘博辰 副教授 (南方科技大学)

时间: 2021-04-08 星期四 16:00-17:00

地点: 光华楼东主楼1704

报告摘要:

We prove a variable coefficient version of the square function estimate of Guth--Wang--Zhang. By a classical argument of Mockenhaupt--Seeger--Sogge, it implies the full range of sharp local smoothing estimates for 2+1 dimensional Fourier integral operators satisfying the cinematic curvature condition. In particular, the local smoothing conjecture for wave equations on compact Riemannian surfaces is completely settled. It is joint work with Chuanwei Gao, Changxing Miao, and Yakun Xi.



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