



## 复旦大学数学科学学院 数学综合报告会

报告题目: Mathematical Analysis of Ground States for  
Rotating Bose-Einstein Condensates

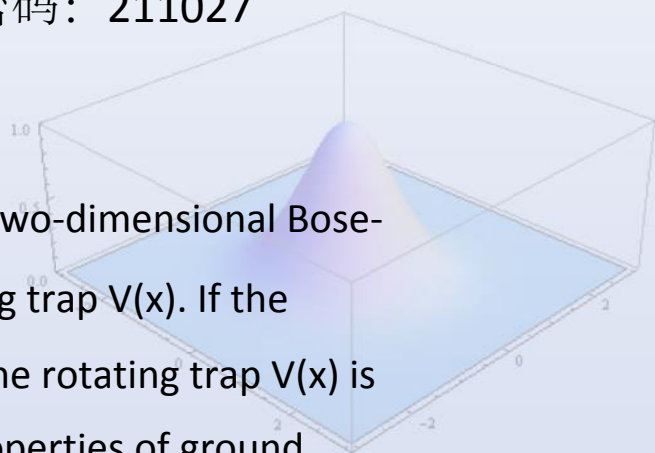
报告人: 郭玉劲 (华中师范大学)

时间: 2021-10-27 星期三 14:30-15:30

地点: 腾讯会议ID: 106 319 558, 密码: 211027

报告摘要:

In this talk, we consider ground states of two-dimensional Bose-Einstein condensates (BECs) in the rotating trap  $V(x)$ . If the interaction among BECs is repulsive and the rotating trap  $V(x)$  is radially symmetric, then the analytical properties of ground states have been well investigated since around 2000. As for the case where the interaction among BECs is attractive, we discuss all kinds of analytical properties of ground states, including the existence, uniqueness, the quantum vortices and etc., no matter whether the rotating trap  $V(x)$  is radially symmetric or not.



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