



## 复旦大学数学科学学院 数学综合报告会

报告题目: **Scaling up the extrinsic curvature in gravitational initial data**

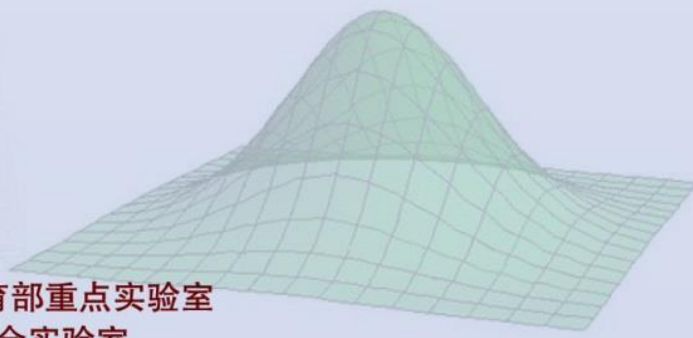
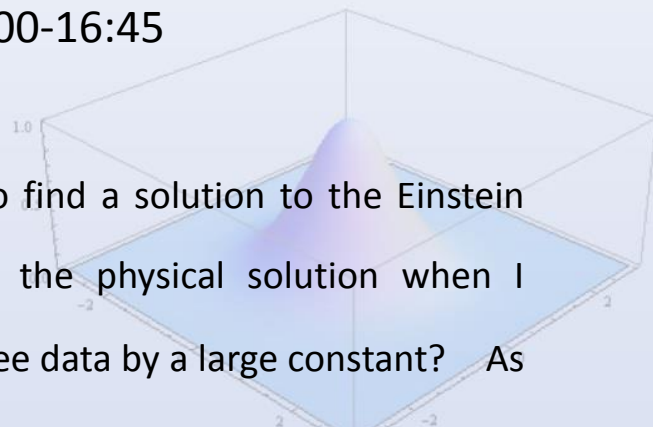
报告人: Niall O Murchadha

(University College Cork, Cork, Ireland)

报告时间: 2016-11-02 星期三 16:00-16:45

报告地点: 光华东主楼 1501

摘要: I solve the Lichnerowicz equation to find a solution to the Einstein initial value constraints. What happens to the physical solution when I multiply the extrinsic curvature term in the free data by a large constant? As expected, the conformal factor which solves the Lichnerowicz equation blows up, and, in the asymptotically flat case, the ADM energy blows up. However, the point value of the physical extrinsic curvature reduces.



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