



## 复旦大学数学科学学院 数学综合报告会

报告题目: **Semilinear wave equations with small data (I)**

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报告时间: 2017-11-09 星期四 16:30-17:30

报告地点: 光华东主楼 1704

摘要: In these two talks, we will examine the global existence vs blow up for solutions to the power type semilinear wave equations with small data ( $(\partial_t^2 - \Delta) u = |u|^p$ ,  $p > 1$ ), particularly for spatial dimension three. The problem is also known as the Strauss conjecture. In the process, we will present various analysis tools to handle this problem. Many of these tools have been proven to be useful for similar problems in broader context, e.g., the analog of the Strauss conjecture on the Schwarzschild and Kerr black hole backgrounds.

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