



复旦大学数学科学学院
数学综合报告会

报告题目：**Gross-Pitaevskii equations in modeling Bose-Einstein condensates and their applications**

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报告时间：2016-08-09 星期二 10:00-11:00

报告地点：光华东主楼 1801

摘要：At zero temperature, Bose-Einstein condensates (BEC) can be modeled by the famous Gross-Pitaevskii equation (GPE) or coupled GPEs or nonlocal GPE. In this talk, the following three topics will be discussed: (1) A review of different GPEs in modeling Bose-Einstein condensates at zero temperature.

(2) Numerical application of time-independent GPE into the study of ground state of BEC. (3) Numerical application of time-dependent GPE into the investigation of dynamics of BEC.

Some open problems on ground state solution of BEC will be involved too.

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