数学与系统科学研究院

计算数学所学术报告

(定期学术报告)

报告人： **黄忠亿副教授**

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报告题目： **Bloch decomposition based method for high frequency waves in periodic media**

邀请人： **文新副研究员**

报告时间： **2008 年 12 月 18 日(周四)**

下午 4:00—5:00

报告地点： **科技综合楼三层 311**

计算数学所报告厅

Abstract：

In this talk, we introduce the Bloch–decomposition based time–splitting spectral method to conduct numerical simulations of the dynamics of (non)linear Schroedinger equations subject to periodic and confining potentials. We consider this system as a two–scale asymptotic problem with different scalings of the nonlinearity. In particular we discuss (nonlinear) mass transfer between different Bloch bands and also present three–dimensional simulations for lattice Bose–Einstein condensates in the superfluid regime.

欢迎大家参加！