数学与系统科学研究院

计算数学所学术报告

(学术研讨班)

报告人： **Prof. Bao Gang**

(Michigan State University, U.S.A)

报告题目：

Maxwell's Equations in Periodic Structures with applications to diffractive optics

报告时间： **2008 年 7 月 30 日(周三)**

下午 2:00—5:00

报告地点： **科技综合楼三层 301**

计算数学所报告厅

Abstract： **This summer course addresses**

significant recent developments in mathematical analysis and computational methods for solving Maxwell's equations in periodic structures. The model problems arise especially in the mathematical modeling of diffractive optics. Particular emphasis is placed on the formulation of the mathematical model, well−posedness and regularity analysis of the solutions of Maxwell's equations in complex media including linear, chiral, and nonlinear media, the design and analysis of new computational approaches, and optimal design and inverse diffraction problems in diffractive optics. Recent developments in near−field and nano optics will also be highlighted.

Lecture III: Numerical Solution: Adaptive Finite Element Methods for Diffraction Gratings (G. Bao and Haijun Wu)

Lecture IV: Modeling and Optimal Design of Resonances

欢迎大家参加！