数学与系统科学研究院

计算数学所学术报告

报告人：　李开泰教授

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报告题目：　复杂边界几何形状下 Navier–Stokes 方程的维数分裂方法

邀请人：　周爱辉研究员

报告时间：　2009 年 7 月 29 日(周三)

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 propose a dimension splitting method for Navier–Stokes

equations (NSEs). The main idea is as follows. The domain of flow in 3D is decomposed into several thin layers. In each layer, The 3D−NSEs can be represented as the sum of a membrane operator and a normal (bending) operator on the boundary of layer. And The Euler central difference is used to approximate the bending operator. When restricting the 3D−NSEs on the boundary in each layer, we obtain a series of two dimensional−three components NSEs (called as 2D−3C−NSEs). Then we construct an approximate solution of 3D−NSES by solutions of those 2D−3C−NSEs.

欢迎大家参加！