数学与系统科学研究院

计算数学所学术报告

报告人： Prof.Wing Kam Liu

(Director of NSF Summer Institute on Nano Mechanics and Materials Northwestern University, Department of Mechanical Engineering, U.S.A.)

报告题目： Multiresolution Life Cycle Materials Design Fusion with Products Design and Manufacturing

邀请人： 崔俊芝院士

报告时间： 2007 年 8 月 30 日(周四)

下午 16:00—16:50

报告地点： 科技综合楼三层 311

计算数学所报告厅

Abstract：

Due to rapidly approaching limits in achievable feature sizes through micro-fabrication, various aspects of nanotechnology have been actively investigated to achieve specific goals in the aforementioned areas of materials, energy production, and electronics that could not be previously realized. The next generation of Computer-aided design (CAD) software will integrate nano and micro structures into CAD software used for products design and manufacturing. The so-called multi-resolution thermal -mechanical- chemical-electrical mechanics provides a promising avenue to the fusion of materials design with products design and manufacturing, Digital 3-Dimensions (D3D) for naval ships, the next generation of cutting and drilling tools materials and applications to micro-systems and solid oxide fuel cells and thermal electric materials will be highlighted.

Professor Wing Kam Liu 简历

Walter P. Murply Professor Wing Kam Liu, Director of the NSF Summer Institute on Nano Mechanics and Materials, has made fundamental contributions to Computational Mechanics and Materials. His finite element, meshless and

multiscale methods were implemented into many commerical and governmental codes, including the Sandia code, Tahoe, which is distributed worldwide. Selected Liu's honors include the Robert Henry Thurston Lecture Award, the Gustus L. Larson Memorial Award, the Pi Tau Sigma Gold Medal and the Melville Medal, all from ASME; the Thomas J. Jaeger Prize by the International Association for Structural Mechanics in Reactor Technology; the SAE Ralph R. Teetor Award; the Computational Structural Mechanics Award and the John von Neumann Medal from USACM; and Computational Mechanics Award from IACM and JSME. Liu serves on the executive committee of the ASME applied mechanics division and IACM. He was the past president of USACM. Liu is cited by the Institute for Scientific Information as one of the most highly cited, influential researchers in Engineering, and an original member, highly cited researcher database. He is the editor and honorary editors of many Journals. Liu has acted as a consultant to many organizations. Liu is a Fellow of ASME, ASCE, USACM, AAM, and IACM.

欢迎大家参加！