

数学与系统科学研究院

计算数学所学术报告

报告人: Prof. Yang Wang

(Michigan State University)

报告题目:

The Mathematics of Analog-to-Digital Conversion

邀请人: 许志强副研究员

报告时间: 2009年6月15日(周一)

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:

Today we live in an increasingly digital age. The data we are given in our daily lives, from email to music to video, are all digital. However, the data we collect are by nature mostly analog. As a result we must convert analog data into digital ones. How reliable are the digital data we are given? Traditional A/D conversion is based on binary expansion of real numbers. While it is very simple and elegant it also has some drawbacks. One of such drawbacks is the lack of robustness. In this talk I'll go over some basic techniques for A/D conversion. I'll also introduce a novel technique by expanding real numbers using the Golden Ratio as the basis. This is a joint work with Ingrid Daubechies, Sinan Gunturk and Ozgur Yilmaz.

欢迎大家参加！