数学与系统科学研究院

计算数学所学术报告

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报告题目：

When Bernoulli Met Gauss --How to make differential geometry useful for quantum gate generation

邀请人： 袁亚湘 院士

报告时间：**2014 年 5 月 14 日（周三）**

下午 16:00-17:00

报告地点： 科技综合楼三层 **311**

计算数学所报告厅

Abstract：

Quantum information processing(QIP) has been identified as one of the key future technologies that are crucial for communication, cryptography, high-performance computing, complex-system simulation, and national security. Quantum control, on the other hand, provides a powerful mathematical tool to study and analyze the QIP devices. In this talk, I will give a brief introduction to quantum control, and in particular, I will focus on our recent work that applies differential geometry to studying the quantum gate generation problems. This new framework will benefit in providing a more efficient numerical method than the traditional ones in calculating the time-optimal solution to generate the target quantum gate.

欢迎大家参加！