数学与系统科学研究院

计算数学所学术报告

报告人： **Prof. S. L. Kalla**

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报告题目： **Mathematical Models with Differential Equations**

邀请人： 洪佳林研究员

报告时间：**2010** 年 **5** 月 **12** 日（周三）

下午 **3**：**00**～**4**：**00**

报告地点： 科技综合楼 **311**

计算数学所报告厅

Abstract： **We discuss some exiting**

applications of ordinary differential equations to real world problems. Using the property of radioactivity, we construct a model involving differential equations, which can predict approximate age of old classical paintings and antiques. Tacoma bridge disaster is analyzed, to show that the phenomenon of resonance was ignored in its planning. Simple population models are presented. A simple model of the blood glucose regulatory system is derived to obtain a fairly reliable criterion for the diagnosis of diabetes. Differential equations are derived which govern the adoption of new innovations. An atomic waste disposal problem is considered, to show the possibility of cracking of tightly sealed drums dumped in to the ocean. Some interesting results of Ramanujan, involving hypergeometric functions are mentioned.

欢迎大家参加！