

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:

**A hybrid asymptotic and augmented compact FVM for singular differential equation and its applications in the control and interface problems.**

邀请人: 龚伟 副研究员

报告时间: 2019 年 6 月 10 日 (周一)

下午 16:00-17:00

报告地点: 科技综合楼三层

311 报告厅

## **Abstract:**

**An accurate and efficient numerical method has been proposed for nonlinear singular two points boundary value problem. The scheme combines Puiseux series asymptotic technique with augmented fourth order compact finite volume method for the problem. Error estimates in different norms are obtained. Numerical examples confirm the theoretical analysis and efficiency of the method. We also apply this method for solving singular control and interface problems, numerical experiments show that the method works well for solving those problems.**

**欢迎大家参加！**