

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:

**Stability of Symmetric Runge-Kutta
Methods for Neutral Delay
Integro-Differential Equations**

邀请人: 唐贻发 研究员

报告时间: 2015 年 12 月 3 日 (周四)

上午 10:00~11:00

报告地点: 数学院南楼七层

702 会议室

Abstract:

The aim of this talk is to analyze the delay-dependent stability of symmetric Runge-Kutta methods, including the Gauss methods and the Lobatto IIIA, IIIB and IIIS methods, for the linear neutral delay integro-differential equations. By means of the root locus technique, the structure of the root locus curve is given and the numerical stability region of symmetric Runge-Kutta methods is obtained. It is proved that, under some conditions, the analytical stability region is contained in the numerical stability region.

欢迎大家参加！