

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Changzheng Qu**

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报告题目:

**Stability of peakons for the
generalized modified Camass-Holm
equation (II)**

邀请人: 常向科 副研究员

报告时间: 2019 年 12 月 7 日 (周六)

晚上 20:00-21:00

报告地点: 数学院南楼二层

224 教室

Abstract:

In the second talk, by constructing the corresponding auxiliary function $h(t,x)$ and establishing a delicate polynomial inequality relating to the two conserved densities with the maximal value of approximate solutions, the orbital stability of single peakon of the gmCH equation is verified. We introduce a new approach to prove the key inequality, which is different from that used for the mCH equation. This extends the result on the stability of peakons for the mCH equation (Qu et al. 2013) successfully to the higher-order case, and is helpful to understand how higher-order nonlinearities affect the dispersion dynamics.

欢迎大家参加！