

数学与系统科学研究院

计算数学所学术报告

报告人: 屈长征教授

(宁波大学)

报告题目:

**Liouville Correspondence Between the Modified KdV
Hierarchy and its Dual Integrable Hierarchy**

邀请人: 胡星标研究员

常向科助理研究员

报告时间: 2017 年 11 月 21 日 (周 二)

晚上 19:30-20:30

报告地点: 数学院南楼七层

702 教室

报告摘要:

We study an explicit correspondence between the integrable modified KdV hierarchy and its dual integrable modified Camassa-Holm hierarchy. A Liouville transformation between the isospectral problems of the two hierarchies also relates their respective recursion operators and serves to establish the Liouville correspondence between their flows and Hamiltonian conservation laws. In addition, a novel transformation mapping the modified Camassa-Holm equation to the Camassa-Holm equation is found. Furthermore, it is shown that the Hamiltonian conservation laws in the negative direction of the modified Camassa-Holm hierarchy are both local in the field variables and homogeneous under rescaling.

欢迎大家参加！