数学与系统科学研究院

计算数学所学术报告

报告人：Prof. Baofeng Feng

（ Department of Mathematics,

University of Texas--Pan American, USA ）

报告题目：

Two-component Hunter-Saxton equation

邀请人： 胡星标 研究员

报告时间：2015 年 8 月 7 日（周五）

晚上 20:00~21:00

报告地点： 数学院南楼六层

602 会议室

Abstract:

In this talk, we study the bilinear form and the general N-soliton solution for a two-component Hunter-Saxton (2-HS) equation, which is the short wave limit of a two-component Camassa-Holm equation. By defining a hodograph transformation based on aconservation law and appropriate dependent variable transformations, we propose a set ofbilinear equations which yields the 2-HS equation. Furthermore, we construct the N-solitonsolution to the 2-HS equation based on the tau functions of an extended two-dimensionalToda-lattice hierarchy through reductions. One- and two-soliton solutions are calculated andanalyzed.

欢迎大家参加！