

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**

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报告题目:

**Soliton solution to the nonlocal NLS
and coupled NLS equations with zero
and nonzero boundary conditions**

邀请人: 胡星标 研究员

报告时间: 2018 年 5 月 22 日 (周二)

晚上 19:00-20:00

报告地点: 数学院南楼六层

602 教室

Abstract:

We consider general soliton solution to a nonlocal nonlinear Schrodinger (NLS) equation and coupled NLS equation for both zero and nonzero boundary conditions. Based on the combination of Hirota's bilinear method and the Kadomtsev-Petviashvili (KP) hierarchy reduction method, we firstly construct general N-soliton solution for zero boundary condition starting from the tau functions of the two-component KP hierarchy. Then, from the tau functions of the single component KP hierarchy, we construct general soliton solutions to the nonlocal NLS and coupled NLS equations with nonzero boundary conditions.

欢迎大家参加！