

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:

**Lattice Boussinesq equation and
convergence acceleration algorithms**

邀请人: 胡星标 研究员

报告时间: 2014 年 11 月 10 日 (周 一)

下午 14:30-15:30

报告地点: 数学院南楼七层 702
会议室

Abstract:

In this talk, we will give the molecule solution of an equation related to the lattice Boussinesq equation with the help of determinantal identities. It is shown that this equation can for certain sequences be used as a numerical convergence acceleration algorithm. Reciprocally, we will derive a non-autonomous form of the integrable equation related to the lattice Boussinesq equation by a new algebraic method. This method starts from constructing generalizations of convergence acceleration algorithms related to discrete integrable systems. Then the non-autonomous version of the corresponding integrable systems are derived. The new operator generalizing the usual forward difference operator in this method was first proposed by C. Brezinski when studying generalizations of the epsilon algorithm.

欢迎大家参加！