数学与系统科学研究院

计算数学所学术报告

报告人： **Prof. J. Nimmo**

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报告题目：

Polynomial eigenfunctions for the discrete KdV equations with applications to inverse scattering for the ultradiscrete KdV equation （II）

邀请人： 胡星标 研究员

报告时间：**2014** 年 **8** 月 **25** 日（周一）

上午 **10:00-11:00**

报告地点： 数学院南楼 **702**

会议室

<u>Abstract</u>：

For compact support potentials, it is shown that the linear problem associated with the discrete KdV equation has polynomial solutions of an explicit form. By considering asymptotic expansions, this result may used to obtain the bound state eigenfunctions used in the direct part of the inverse scattering procedure for the ultradiscrete KdV equation proposed by Willox et al (2010, 2012). Finally, will describe a conjectured combinatorial procedure for constructing the bound states.

欢迎大家参加！