

数学与系统科学研究院
计算数学所网络学术报告

报告人: **Prof. Dajun Zhang**

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报告题目:

**On elliptic aspects of some discrete
integrable systems (I)**

邀请人: 常向科 副研究员

报告时间: **2021 年 11 月 10 日 (周三)**

下午 14:00-14:50

报告工具: **腾讯会议 (ID: 624 150 949)**

Abstract:

There are two ways elliptic curves can play a role in integrable systems: either as elliptic type solutions (i.e. solutions expressible in terms of elliptic functions), or as elliptic deformation of the equations themselves. In either way, the study of the elliptic case is often richer than the rational and trigonometric/hyperbolic cases, and reveals many new features of the models in question. This is the first half part of the series of talks.

Part I: I will take the discrete potential KdV as an example, to introduce elliptic deformation to the equation by using the Cauchy matrix approach, where the Sylvester type matrix equation is subject to a matrix elliptic curve.

欢迎大家参加！