# 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. Jacek Szmigielski**

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**报告题目**：

**A 2-component Camassa-Holm equation, Euler-Bernoulli Beam Problem and Non-commutative Continued Fractions, Part I**

**邀请人**： 常向科 副研究员

**报告时间**：2020 年 12 月 2 日（周三）

上午 **10:00-11:00**

**报告工具**: **Zoom** 会议（**ID**: **374 381 0826**）

入会密码： **K3jmYB**

# Abstract：

This is a series of two talks based on my recent joint work with R. Beals.  I will present a new approach to the Euler-Bernoulli beam based on a matrix string problem.  The motivation for this type of approach goes  back to the Camassa-Holm (CH) equation and its relation to an inhomogeneous string.  In the first part of the talk I will discuss   the spectral properties of the matrix string problem with Dirichlet boundary conditions.  This involves a certain compact operator which naturally can be connected to the matrix string problem and whose properties determine the spectral properties of the matrix string operator.  I will conclude the first talk with a brief discussion of Wronskians and Green's kernels, setting a stage for the inverse problem.

欢迎大家参加！