

数学与系统科学研究院  
计算数学所网络学术报告

报告人: 刘青平 教授

( 中国矿业大学(北京) )

报告题目:

**Bäcklund transformation for the  
short pulse equation**

邀请人: 常向科 副研究员

报告时间: 2020 年 10 月 24 日(周六)  
上午 9:30-10:30

报告工具: 腾讯会议 (ID: 349 735 838)

## **Abstract:**

**A Bäcklund transformation (BT), which involves both independent and dependent variables, is established and studied for the short pulse (SP) equation. Based it, the nonlinear superposition formulae for 2-, 3-, and 4-BT are presented. The general result for the composition of N-BTs is achieved and given in terms of determinants. As applications, various solutions including loop solitons, breather solutions, and their interaction solutions are worked out.**

**欢迎大家参加！**