

# 2023 泛函分析及空间理论 天元暑期研讨班

Dispersive equations on symmetric and locally  
symmetric spaces

Hong-Wei ZHANG (张鸿伟)  
Paderborn University

## Abstract

A challenge in harmonic analysis on non-compact symmetric spaces of higher rank is that the Plancherel density involved in the inverse Fourier transform is not always a differential symbol. In the first part of this talk, we will present recent progress in overcoming this difficulty and how it can be used to obtain pointwise wave kernel estimates. In the second part, we will briefly show their applications in the study of nonlinear dispersive equations and discuss, on a locally symmetric space, how the geometric properties of the discrete group affect these results.

**Time:** Saturday, August 5, 2023, 16:00-17:30

**Venue:** Zheng Xin Building, Room 21

More information:

<http://im.hit.edu.cn/2023/0710/c15123a320434/page.htm>

