



# 北京理工大学

## 数学与统计学院学术报告

### Mini course: Gibbs measures and Gibbs dynamics for nonlinear dispersive PDEs

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**时间:** 2024年7月2-4 日上午10:00--11:30

**地点:** 文萃楼E909

**摘要:** In recent years, there has been significant progress on constructing Gibbs measure and understanding their associated dynamics for dispersive partial differential equations.

I will review how this subject has evolved to its current shape since the seminal work of Bourgain in the 1990s. Bourgain's introduction of the Fourier restriction norm method, rigorous construction of the focusing Gibbs measure, and the invention of the invariant measure argument to globalise local dynamics have been foundational. Recent advancements have been built upon these pillars, with Barashkov and Gubinelli's variational argument, the concept of para-controlled distributions, and Deng-Nahmod-Yue's random average operator and random tensor arguments, further expanding the boundaries of our understanding in this field.

**报告人简介:** 王玉昭，英国伯明翰大学副教授，主要从事于偏微分方程的研究，完成三十余篇学术成果发表在CMP, AIHP, PLMS, JFA, CPDE, Sigma等国际权威学术期刊。