



Probabilistic well-posedness of dispersive PDEs beyond variance blowup

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李佳玮老师目前在爱丁堡大学数学学院担任概率论讲师。于 2019 -2022 年期间，在卡内基梅隆大学担任 Zeev Nehari 访问助理教授。于 2019 年在牛津大学获得博士学位，师从 Zhongmin Qian 教授。

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Abstract: In this talk, we use the fourth moment theorem to investigate a possible extension of probabilistic well-posedness theory of nonlinear dispersive PDEs with random initial data beyond variance blowup. As a model equation, we study the Benjamin-Bona-Mahony equation (BBM) with Gaussian random initial data. By introducing a suitable vanishing multiplicative renormalization constant on the initial data, we show that solutions to BBM with the renormalized Gaussian random initial data beyond variance blowup converge in law to a solution to the stochastic BBM forced by the derivative of a spatial white noise.

Based on the joint work with Guopeng Li (BIT), Tadahiro Oh (Edinburgh) and Nikolay Tzvetkov (ENS Lyon).

讲座时间:

2025. 10. 29 周三下午 16:00-17:00

线下会议地点: 文萃楼 M124

线上会议地点: ZOOM 会议室会议 ID: 3541437366 密码: 123456

主办单位:

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