

学术报告

报告题目: Multi solitary waves to stochastic nonlinear Schrödinger equations

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报告时间: 2023年4月28日, 14:00-15:00

报告地点: ZOOM会议 876 0592 8254 密码: 2023

发布平台: 哈尔滨工业大学研究院&武汉大学

报告摘要: In this talk we will present the recent work on the multi solitary waves to stochastic nonlinear Schrödinger equations driven by linear multiplicative noise, in both the mass-critical and subcritical cases. Unlike in the deterministic case, the existence of stochastic multi-solitons cannot be obtained from that of stochastic multi-bubble blow-up solutions, due to the absence of pseudo-conformal invariance. We present a constructive proof by utilizing the rescaling approach and the modulation method. The constructed multi-solitons behave asymptotically as a sum of finitely many solitary waves, and the convergence rate of the remainders can be of either exponential or polynomial type, which reflects the effects of noise on the asymptotical behavior of solutions.

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