学术报告

Strong instability of standing waves for nonlinear Schrodinger equations with harmonic potential

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报告地点：天津大学 6 号楼 108 教室

报告摘要：We study strong instability of standing waves $e^{i\omega t} \phi_{\omega}(x)$ for nonlinear Schrödinger equations with L^2-supercritical nonlinearity and a harmonic potential, where ϕ_{ω} is a ground state of the corresponding stationary problem. We prove that $e^{i\omega t} \phi_{\omega}(x)$ is strongly unstable if $\partial_{\lambda}^2 E(\phi_{\omega}^{\lambda}) |_{\lambda=1}\le 0$, where E is the energy and $v^{\lambda}(x)=\lambda^{N/2} v(\lambda x)$ is the L^2-invariant scaling.

欢迎大家参加！