



偏微分方程及其应用中心

学术报告

报告题目: Asymptotic stability of the sine-Gordon kink outside symmetry-(I)

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摘要: We present a perturbative proof of the full asymptotic stability of the sine-Gordon kink outside symmetry under small perturbations in weighted Sobolev norms. The strategy of our proof combines a space-time resonances approach based on the distorted Fourier transform to capture modified scattering effects with modulation techniques to take into account the invariance under Lorentz transformations and under spatial translations. The entire framework of our proof, including the systematic development of the distorted Fourier theory, is general and not specific to the sine-Gordon model. This is joint work with Jonas Luhrmann (Texas A&M).