

Seminar EDPs

Speaker: Jiaqi Liu (Chinese Academy of Sciences, China).

Title: Long time asymptotics and soliton stability for the sine-Gordon equation.

Abstract: We compute the long time asymptotics of the sine-Gordon equation whose initial condition supports finitely many solitons(kinks/breathes). Our approach is the nonlinear steepest descent for Riemann-Hilbert problems. Through certain type of nonlinear Fourier transform, we characterize various quantities (radiation, phase shift, error estimates) by the regularity of the initial condition. We then extend our results to lower regularity spaces through a refined approximation argument. In particular, we characterize the initial condition that rules out wobbling kinks.

Martes 6 de octubre a las 12pm en el link zoom

<https://uchile.zoom.us/j/83863711391?pwd=R2VqYTILeDRaaXU5VTVkU0lvSkVxQT09>

Pass: 684060