Blow-up Versus Global Well-posedness for the focusing INLS with inverse-square potential

Mingming Deng¹, Jing Lu², and Fanfei Meng³

June 7, 2021

Abstract

We study the focusing inhomogeneous nonlinear Schr\"odinger equation with inverse-square potential $\$ i\partial_tu+\Delta u-\frac{a}{|x|^2}u+|x|^{-b}|u|^{2}u=0, \$\$ where \$a>-\frac14\$ and \$0

Hosted file

Blow-up Versus Global Well-posedness for the focusing INLS with inverse-square potential.pdf available at https://authorea.com/users/418321/articles/525096-blow-up-versus-global-well-posedness-for-the-focusing-inls-with-inverse-square-potential

¹Graduate School of China Academy of Engineering Physics

²China Agricultural University

³Institute of Applied Physics and Computational Mathematics