



Seminar of the Work Group
Nonlinear Partial Differential Equations
WS 22/23

Speaker: Rebekka Zimmermann
November 29th, 2022, 14:00 - 15:30
Seminar room: 3.068

Strichartz estimates for Schrödinger equations with critical singularities

KIT

Abstract

We consider Schrödinger equations with real-valued potentials exhibiting strong singularities at the origin. Under suitable assumptions on the potential one can prove uniform weighted resolvent estimates for the Schrödinger operator and we will sketch the main steps of how to use these to prove global-in-time Strichartz estimates. The results are taken from the article "Uniform resolvent and Strichartz estimates for Schrödinger equations with critical singularities" by J. M. Bouclet and H. Mizutani.