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# Inverse Problems Seminar

*Linearized inverse Schrodinger potential problems at a large wavenumber: increasing stability and numerical inversion*

*Prof. Shuai Lu  
Fudan University*

## Abstract

Inverse Schrodinger potential problem concerns about recovery of the potential function of the Schrodinger equation in a bounded domain. In this talk, we introduce our recent results on the linearized inverse Schrodinger potential problems where varies increasing stability with respect to the growing wavenumber are derived. To numerically solve these problems, several Fourier based and deep neural network based inversion algorithms are constructed to shed light on the theoretical findings.

Date: 6 October 2022 (Thursday)  
Time: 10:00am – 11:00am (Hong Kong Time)  
ZOOM link: <https://cuhk.zoom.us/j/98241093146>  
Meeting ID: 982 4109 3146

*All are Welcome*