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# Inverse Problems Seminar

*Regularization, Acceleration and Localization  
for Ensemble Kalman Inversion (EKI)*

*Prof. Xin TONG  
National University of Singapore*

## Abstract

EKI is a technique for the numerical solution of inverse problems. A great advantage of the EKI's ensemble approach is that derivatives are not required in its implementation. But many theoretical questions regarding EKI remain unclear. This includes how to introduce regularization, how to introduce time varying step sizes, and how to use EKI in high dimensional settings. This talk we will provide some EKI modifications that address these issues rigorously.

Date: 8 September 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*