



數學系
香港中文大學

Phone: (852) 3943 7988 • Fax: (852) 2603 5154 • Email: dept@math.cuhk.edu.hk (Math. Dept.)
Room 220, Lady Shaw Building, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

Inverse Problems Seminar

Modelling of uncertainties in quantitative photoacoustic tomography

Prof. Tanja Tarvainen
University of Eastern Finland

Abstract

In quantitative photoacoustic tomography (QPAT), the aim is to estimate concentrations of light absorbing molecules from photoacoustic measurements. In this work, we study the optical inverse problem of QPAT. Numerical solution of this inverse problem requires modelling of light transport. We investigate utilising the diffusion approximation as a forward model when the accurate model is the radiative transfer equation. Furthermore, modelling of uncertainties using Bayesian approximation error modelling is studied.

Date: April 19, 2023 (Wednesday)
Time: 4:00pm – 5:00pm (Hong Kong Time)
ZOOM link: <https://cuhk.zoom.us/j/98241093146>
Meeting ID: 982 4109 3146

All are Welcome