

RIMS Workshop on

"Recent developments on inverse problems for partial differential equations and their applications"

On behalf of the organizer, we are please to inform you that the RIMS workshop on "Recent developments on inverse problems for partial differential equations and their applications" will be held on the following schedule.

Date: January 6th (Wed.), 2021 -- January 8th(Fri.), 2021 Organizer: Takashi Ohe (Okayama University of Science)

This workshop will take place as an **online style** via Zoom.

Program

January 6th (Wed.)

10:00 -- 10:50 Koya Sakakibara (Okayama University of Science) Numerical analysis of constrained total variation flows and its application to the Kobayashi--Warren--Carter model

11:00 -- 12:00 Xuefeng Liu (Niigata University) Pointwise error estimation and high-precision resistance measurement with four-probe method

13:30 -- 14:20 Daiki Shiozawa (Kobe University) Three-dimensional reconstruction of leaked gas cloud based on computed tomography processing of infrared measurement data

14:30 -- 15:20 Tomoya Takeuchi (University of Tokyo) Numerical homogenization of dual-phase steel by nonlinear conjugate gradient method

15:40 -- 16:30 Lorenzo Cavallina (Tohoku University) On an overdetermined problem for composite materials

January 7th (Thu.)

9:10 -- 10:10 Alexandru Tamasan (University of Central Florida) Range characterization of the X_ray transform on the Fourier Lattice

10:20--11:20 Jenn-Nan Wang (National Taiwan University) Non-radiating sources for the elastic waves in anisotropic inhomogeneous media

11:30--12:20 Hiroyuki Kudo (University of Tsukuba) Mathematics of image reconstruction in sparse-view CT and interior CT

13:40--14:30 Mizuka Komatsu (Kobe University)

An algebraic approach to challenges on identification problems in systems biology

14:40--15:30 Ippei Obayashi (RIKEN AIP) Inverse problems on persistence diagrams

15:50--16:40 Tsutomu Matsuura and Saburou Saitoh (Gunma University) Inverse problems and theory of reproducing kernels --- theory and numerical experiments ---

January 8th (Fri.)

9:10--10:10 Makoto Miura (University of Tokyo) Reconstruction problems in algebraic vision

10:20--11:10 Kenjiro Kimura (Kobe University) Development of multi-static scattering field inverse analysis theory and next-generation breast cancer diagnostic imaging technology

11:20--12:10 Jin Cheng (Fudan University) A linear nonlocal model for outbreak of COVID-19 and parameter identification

13:30--14:20 Takashi Furuya (Nagoya University) The monotonicity method for the inverse crack scattering problem

14:30--15:20 Ryusei Yamashita (Tokyo Metropolitan University) Reconstruction of the defect by the enclosure method for inverse problems of the magnetic Schrödinger operator

15:40--16:30 Toshiaki Yachimura (Kyoto University) On an inverse Robin eigenvalue problem appearing in thin coating problems

Notice

To join this work shop, you have to register your name, afflication, and e-mail address. For detail, please contact to the following e-mail address of organizer.

Contact address: Takashi Ohe (email: ohe@xmath.ous.ac.jp)