# Taiwan-Japan Joint Workshop on Inverse Problems in Kyoto 2019

Date : March 30th – April 1st, 2019.

Venue : Kyoto University, Yoshida Main Campus

Lecture Room 111 — March 30,31

(Faculty of Engineering Integrated Research Bldg.)

Applied Analysis Seminar Room — April 1 (Integrated Research Building No.12, 2F, 203)

#### March 30 (Sat.)

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9:15-9:45	Registration		
9:45-10:00	Opening Address Y. Iso and J-N.Wang		
10:00-10:40	Jenn-Nan Wang (National Taiwan University) Quantitative uniqueness estimates for complex elliptic equations and application to size estimate		
10:40-11:20	Dongwoo Sheen (Seoul National University) $P_1$ -nonconforming polyhedral finite elements in high dimensions		
11:20-12:00	Daisuke Tagami (Kyushu University) An iterative domain decomposition method for magnetic field problems with the gauge condition		
12:00	Group Photo		
13:30-14:10	Atsushi Suzuki (Osaka University) Mixed finite element solution of a semi-conductor problem by Dissection spars direct solver		
14:10-14:50	Keh-Ming Shyue (National Taiwan University) Numerical methods for barotropic fluid equations with inertia regularization		
15:00-15:40	Chin-Tsang Chiang (National Taiwan University) Estimation and model checking for general semiparametric recurrent event mod with informative censoring		
15:40-16:20	Kazuki Niino (Kyoto University) Eigenvalue computations for periodic boundary value problems for Maxwell's equations with the periodic FMMs and the Sakurai-Sugiura projection method		
16:30-17:10	Wei-Chen Chang (National Taiwan University)		

A recent work about interior transmission eigenvalues problems

## 17:10–17:50 Kazunori Matsui (Kanazawa University) An $\varepsilon$ -Stokes problem with Neumann boundary condition

#### Banquet

### March 31 (Sun.)

9:30-10:10	Masato Kimura (Kanazawa University) Snow crystal growth model using generalized crystalline method		
10:10-10:50	Pengwen Chen (National Chung Hsing University) Algorithms in phase retrieval		
11:00-11:40	Chien-Hong Cho (National Chung Cheng University) On the numerical solutions of blow-up problems		
11:40-12:00	Yu-Hsun Lee (Kyoto University) Design of modern visualization interface for FreeFem++		
13:30-14:10	Ming-Chih Lai (National Chiao Tung University) Efficient fractional step method for inextensible interface problem		
14:10-14:50	Shugo Yasuda (University of Hyogo) Numerical study on pattern formation of chemotactic bacteria based on a kinetic transport equation		
15:00-15:40	Ching-Lung Lin (National Cheng Kung University) Unique continuation property for multi-terms time fractional diffusion equations		
15:40-16:20	Hiroshi Takase (The University of Tokyo) Inverse source problem for the gravitational waves in general relativity		
16:30-17:10	Gi-Ren Liu (National Cheng Kung University) Explore intrinsic geometry of sleep dynamics and predict sleep stage by unsupervised learning techniques		
16:10-17:30	Suguru Maekawa (Kyoto University) Multiscale coefficient reconstruction in time harmonic viscoelastic equations for MR elastography		
17:30	Closing Address H. Imai and H. Fujiwara		

#### April 1 (Mon.)

Personal Discussion

30/	March (Sat.)	31/March (Sun.)	
9:15-9:45	Registration		(Chair: J-N. Wang)
9:45-10:00	Opening Address	9:30-10:00	M. Kimura
	(Chair: Y. Iso)	10:10-10:50	P. Chen
10:00-10:40	J-N. Wang		(Chair: M-C. Lai)
10:40-11:20	D. Sheen	11:00-11:40	C-H. Cho
11:20-12:00	D. Tagami	11:40-12:00	Y-H. Lee
	Group Photo		
	(Chair: J-H. Lee)		(Chair: S. Taguchi)
13:30-14:10	A. Suzuki	13:30–14:10	M-C. Lai
14:10-14:50	K-M. Shyue	14:10-14:50	S. Yasuda
	(Chair: D. Sheen)		(Chair: I-K. Chen)
15:00-15:40	C-T. Chiang	15:00-15:40	C-L.Lin
15:40-16:20	K. Niino	15:40-16:20	H. Takase
	(Chair: H. Fujiwara)		(Chair: H. Imai)
16:30-17:10	W-C. Chang	16:30-17:10	G-R. Liu
17:10-17:50	K. Matsui	17:10-17:30	S. Maekawa
	Banquet		Closing Address

1/April (Mon.) Personal Discussion

Organizers Jenn-Nan Wang (National Taiwan University)

Jyh-Hao Lee (Academia Sinica) Yuusuke Iso (Kyoto University) Hitoshi Imai (Doshisha University) Hiroshi Fujiwara (Kyoto University)