

2012 Taiwan-Japan Workshop on Applied Inverse Problems

Time: Dec. 15(Sat.) - 17(Mon.), 2012

Venue: Department of Mechanical Engineering, Nat. Cheng Kung University, Tainan

Location: 91101 Hsiang-Hsien Auditorium (1st floor, Dept of ME, in Tzu-Chiang campus near Lingsen Rd.)

Program:

Dec. 15 (Sat.)

16:00 Registration

16:30 – 16:40 Opening address

--- Plenary Session ---

16:40 - 17:40 "Inverse problems in MRI physics"
Prof. Shin-ichi Urayama (Kyoto University)

18:00- Welcome party

Dec. 16 (Sun.)

--- Tutorial Lectures (aimed for students)---

9:30 - 10:15 "Introduction to multiple-precision arithmetic for reliable computations"
Prof. Hiroshi Fujiwara (Kyoto University)

10:15 – 10:30 “How to install exflib”

--- Students are strongly recommended to bring PCs---

**10:45 - 11:45 "Mathematical modeling of diffused optical tomography"
Prof. Yuusuke Iso (Kyoto University)**

11:45 Group photo

--- Research Session ---

**13:30 -- 14:00 “Analytical estimates of surface conditions in laser surface heating process with experimental data”
Mr. Jing-Hong Lin and Mr. Xiao-Jie Xu (Prof. Han-Taw Chen, National Cheng Kung University)**

**14:00 -- 14:30 "Reduction of memory requirement for time domain BIEM with Lubich CQM"
Prof. Hitoshi Yoshikawa (Kyoto University)**

(break)

**14:45 -- 15:15 “Estimation of equivalent heat convective coefficient in continuous annealing line by the method of direct sensitivity coefficient”
Prof. Tei-Chen Chen (National Cheng Kung University)**

**15:15 -- 15:45: "Inverse problems for diffusion and telegraph equation approximation of the radiative transport equation"
Prof. Nobuyuki Higashimori (Hitotsubashi University)**

(break)

**16:00 -- 16:30 "Comparison of numerical methods for pole- assignment problems, from the viewpoint of condition numbers"
Prof. Chen-Shu Wang (National Cheng Kung University)**

**16:30—17:00 "Numerical experiments for the distinction between smooth functions and analytic functions"
Prof. Hitoshi Imai (University of Tokushima)**

17:00-17:30 **“The design of uniform tube flow rates for Z-type compact parallel flow heat exchangers”**
Prof. Cheng-Hung Huang and Chun-Hsien Wang (National Cheng Kung University)

18:00 – Banquet

Dec. 17 (Mon.) Academic visit to historic places in Tainan

Sponsored by: Department of Mechanical Engineering, Nat. Cheng Kung University

Members of organizing committee:

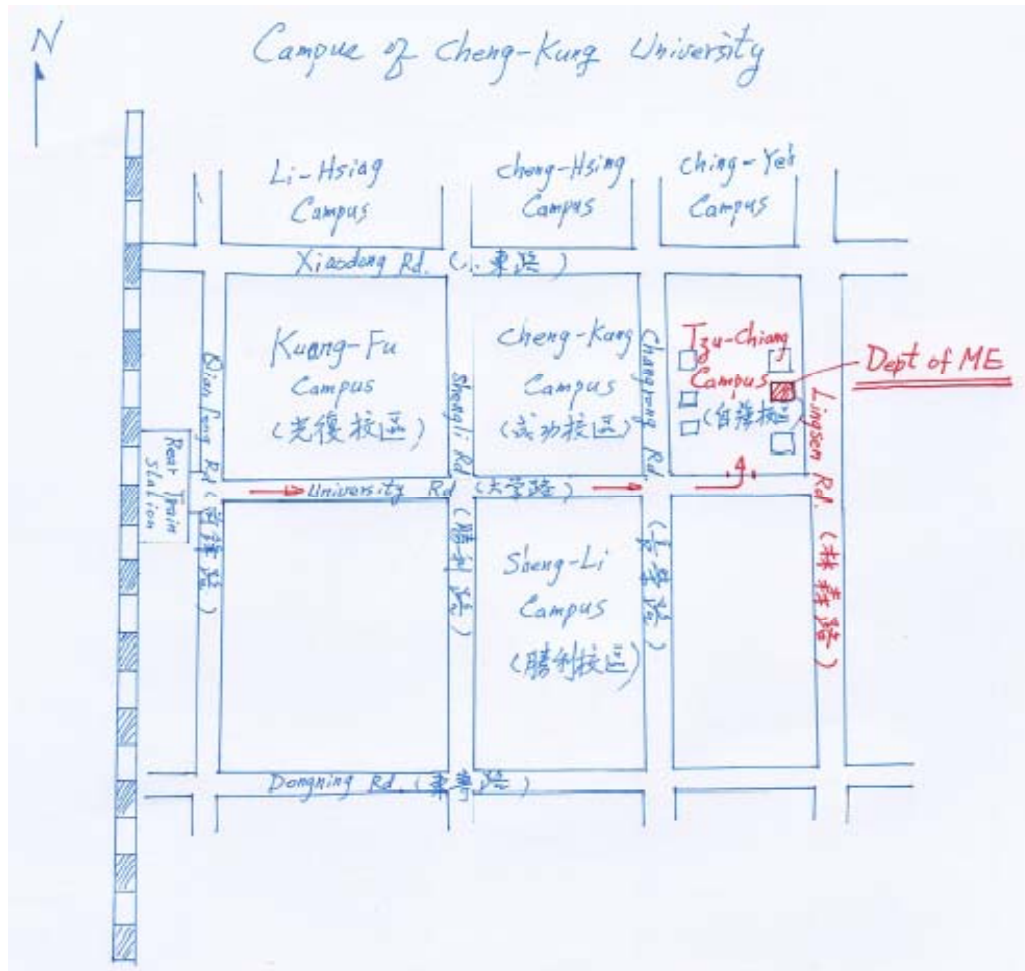
Prof. Yuusuke Iso (Kyoto University)

Prof. Hitoshi Imai (University of Tokushima)

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Prof. Chen-Shu Wang (National Cheng Kung University)

Prof. Jyh Hao Lee (Inst. of Math, Academia Sinica)



Transportation information from Tainan station of High Speed Rail to Dept. of ME, Cheng Kung University:

Tainan station of High Speed Rail ----> move to Shalun station of Taiwan Railways by walking on the second floor of building (about 5 min.) ----> take the train from Shalun station to Tainan station (about 30 min.) ----> move to the Rear Train station and walk to Dept. of ME along the University Rd. (about 15 min.)