

# Slovenia-Japan AICS Mini-Symposium

## ”Nonlinear Phenomena in Complex Systems”

10:00-18:00, November 21 (Wed), 2007

The 3rd Conference Room (55-S-2F), Waseda University, Tokyo, Japan

### Program

*Chairman;* Kazuo Takatsuka (University of Tokyo)

10:00-10:20 Opening address by Yoji Aizawa

10:20-10:45 Marko Robnik, Prof. (University of Maribor)  
”Current research on classical and quantum chaos at CAMTP”

10:45-11:10 Tomoshige Miyaguchi, Dr. (Hokkaido University)  
”Heat conduction and nonlinear responses in hard disk systems”

### Coffee Break (10 minutes)

11:20-11:45 Ken Umeno, Dr. (National Institute of Information and Communications Technology)  
”Chaotic Analysis and Chaos Fourier Transform”

11:45-12:10 Valery Romanovski, Prof. (University of Maribor)  
”Limit cycles and centers in polynomial systems of ODE’s”

12:10-12:45 Shigeru Wessugi, Prof. (Waseda University)  
”Illusory Body Sensation and Body Image”

### Lunch

*Chairman;* Akira Shudo (Tokyo Metropolitan University)

14:00-14:25 Marko Marhl, Prof. (University of Maribor)  
”Signal Transduction in Biological and Electrical Engineering Systems”

14:25-14:50 Marko Znidaric, Dr. (University of Ljubljana)  
”Classicality of maximally entangled states”

14:50-15:15 Yoshihiro Miyake, Prof. (Tokyo Institute of Technology)  
”Timing Mechanism in Co-creative Communication”

### Coffee Break (20 minutes)

15:35-16:00 Martin Horvat, Dr. (University of Ljubljana)  
”The dynamical approach to the abstract linear chains of quantum scatterers”

16:00-16:25 Song-Ju KIM, Dr. (National Institute of Information and Communications Technology)  
”Recovery of Chaotic Signals Using On-line ICA Algorithm”

16:25-16:50 Iztok Pizorn, Mr. (University of Ljubljana)  
”Operator space entanglement entropy”

16:50-17:15 Takayuki Tatekawa, Dr. (Kogakuin University)  
”Equilibrium and quasi-equilibrium state in long-range interacting systems”

17:15-17:40 General discussion

17:40-18:00 closing address by Marko Robnik

18:30-20:30 **Banquet**

## **Organizers**

Marko Robnik, Prof., CAMTP, University of Maribor  
Akira Shudo, Prof., Tokyo Metropolitan University  
Kazuo Takatsuka, Prof., University of Tokyo  
Yoji Aizawa, Prof., Waseda University

## **Sponsors,**

AICS (Advanced Institute for Complex Systems, Waseda University)  
RISE (Research Institute for Science and Engineering, Waseda University)  
MHEST (Ministry of Higher Education Science and Technology, Slovenia)  
JSPS (Japan Society for the Promotion of Science, Japan)

## **List of participants**

### Slovenia

Prof. Marko Robnik (University of Maribor)  
Prof. Valery Romanovsky (University of Maribor)  
Prof. Marko Marhl (University of Maribor)  
Dr. Marko Znidaric (University of Ljubljana)  
Dr. Martin Horvat (University of Ljubljana)  
Mr. Iztok Pizorn (University of Lyubljana)

### Japan

Prof. Yoji Aizawa (Waseda University)  
Prof. Shigeru Wesgi (Waseda University)  
Prof. Yoshihiro Miyake (Tokyo Institute of Technology)  
Dr. Ken Umeno (National Institute of Information and Communications Technology)  
Dr. Song-Ju Kim (National Institute of Information and Communications Technology)  
Dr. Takayuki Tatekawa (kogakuin University)  
Dr. Tomoshige Miyaguchi (Hokkaido University)  
Prof. Mitsugu Matsushita (Chuo University)  
Prof. Yoshiyuki Miwa (Waseda University)  
Prof. Yoshihiro Yamazaki (Waseda University)  
Prof. Shuichi Tasaki (Waseda University)  
Prof. Takashi Matsumoto (Waseda University)  
Prof. Mitsunori Takano (Waseda University)  
Prof. Keiichi Maeda (Waseda University)  
Prof. Akira Shudo (Tokyo Metropolitan University)  
Prof. Kazuo Takatsuka (University of Tokyo)  
Mr. Shigeru Ajisaka (Waseda University)  
Mr. Takashi Kaburagi (Waseda University)