IIASA – Kyoto University
The First Joint International Seminar on Applied Analysis and Synthesis of Complex Systems (ASCS)

The 21st Century COE Program for Research and Education on Complex Functional Mechanical Systems, Kyoto University

June 28-29, 2004.
International Institute for Applied Systems Analysis
Laxenburg, Austria

Tentative Agenda

28 June, Wodak Room	
SESSION 1:	
9:30 – 10:00	An Overview of IIASA's Research, *Leen Hordijk, IIASA Director*
10:00 – 10:30	An Overview of the COE Program, *Kazuo Tsuchiya* (Kyoto University, Jp.)
10:30 – 11:00	Coffee break
11:00 – 12:00	Some Factors Affecting the Air-Sea Gas Transfer -Towards Modeling of Turbulent Transport Phenomena in Atmosphere-Ocean System, *Satoru Komori* (Kyoto University, Jp.)
12:00 – 13:45	Lunch
SESSION 2:	
13:45 – 14:30	Dynamical and Complex Behaviors in Control Systems and Human-Machine Co-Adaptive Systems, *Tetsuo Sawaragi* (Kyoto University, Jp.)
14:30 – 15:15	Coffee break
SESSION 3: Invited Keynote Speech Session	
15:15 – 16:15	Analysis and Design of, and Displays for, Complex Human-Machine Interactions, *Gunnar Johannsen* (University of Kassel, Germany)
16:30 – 17:30	Haptics and Control in Human Interactive Telepresence Systems, *Martin Buss* (Technische Universität München, Germany)
18:00	Social event

29 June, Wodak Room

SESSION 4: Global Modeling of Environmental Issues

9:30 – 10:00	Momentum and Heat Transport Mechanisms of Fluid Motion in a Rotating Annulus, *Masato Nagata* (Kyoto University, Jp.)
10:00 – 10:30	On the Exact Stabilization of an Uncertain Dynamics, *Arkady Kryazhimskiy and Vyacheslav Maksimov* (IIASA), presented by *Nikolai Melnikov*
10:30 – 10:45	Coffee break

SESSION 5: Adaptation in Biomechanics

10:45 – 11:15	Bone Functional Adaptation by Remodeling through Hierarchical Mechanical Systems from Cell to Tissue, *Taiji Adachi* (Kyoto University, Jp.)
11:15 – 11:45	From "Function Designing" to "Bio-Environment Designing", *Naohide Tomita* (Kyoto University, Jp.)
11:45 – 14:00	Lunch

SESSION 6: Introduction of Researches from IIASA

14:00 – 14:45	A Structured Modeling Technology, *Marek Makowski* (IIASA)
14:45 – 15:15	Coffee break

SESSION 7: Design and Control of Complex Mechanical Systems

15:15 – 15:45	Structural Topology Optimization for the Design of Novel Mechanical Structures, *Shinji Nishiwaki* (Kyoto University, Jp.)
15:45 – 16:15	Design of an Adaptive Control System by Modular Learning: Flight Control of an Autonomous Unmanned Helicopter, *Hiroaki Nakanishi* (Kyoto University, Jp.)

SESSION 8:

16:15 – 16:45	From Seminar Organizers, *Marek Makowski* (IIASA) *and Tetsuo Sawaragi* (Kyoto University, Jp.)
16:45 – 17:00	Concluding Remarks, *Kazuo Tsuchiya* (Kyoto University, Jp.)