

Lecture program in full

November 12 (Monday)

8:15 - 8:50 **Registration**

8:50 - 9:00 **Katsuhiko Nakamura**

Opening address

Chair: **Katsuhiko Nakamura**

9:00 - 9:30 **Syuji Miyazaki** (Kyoto University)

Large deviation statistics and beyond -- Hirokazu Fujisaka's faraway dreams --

9:30 - 10:10 **Valery Romanovski** (University of Maribor)

Limit cycles and centers in polynomial systems of ODE's

10:10 - 10:30 **Tsuyoshi Mizuguchi** (Osaka Prefecture University)

Buridan's donkey in chaos-chaos transition

10:30 - 11:00 Coffee break

Chair: **Tomaz Prozen**

11:00 - 11:30 **Takao Ohta** (Kyoto University)

Turing patterns in three dimensions

11:30 - 12:10 **Edvard Govekar** (University of Ljubljana)

Instabilities of manufacturing processes

12:10 - 12:30 **Kazue Kudo** (Osaka City University)

One-magnon spin dynamics under an oscillating field

12:30 - 14:00 Lunch

Chair: **Dean Korosak**

14:00 - 14:30 **Takahisa Harayama** (ATR Wave Engineering Laboratories)

2D Microcavity Lasers

14:30 - 15:00 **Iztok Pizorn** (University of Ljubljana)

Operator space entanglement entropy in a transverse Ising chain

15:00 - 15:30 **Tatsuya Uezu** (Nara Women's University)

Collective behaviour of phase oscillator network with finite connectivity

15:30 - 16:00 **Hiroaki Daido** (Osaka Prefecture University)

Dynamics of a chain of coupled randomly inactivated oscillators

16:00 - 16:30 Coffee break

Chair: **Marko Marhl**

16:30 - 17:00 **Kazuo Takatsuka** (University of Tokyo)

Nonlinear dynamics in structural transition of atomic clusters

17:00 - 17:30 **Marko Znidaric** (University of Ljubljana)

Entanglement of random states

17:30 - 18:00 **Mikito Toda** (Naka Women's University)

Time-series analysis of molecular dynamics simulations involving
biomolecules

18:00 - 18:20 **Takaaki Monnai** (Waseda University)

New aspects of escape rate: Case studies by structured saddle and spatio
temporal fluctuations

November 13 (Tuesday)

Chair: **Valery Romanovski**

- 9:00 - 9:30 **Takashi Matsumoto** (Waseda University)
Gene regulatory network prediction: A stochastic dynamical system with Zipf prior
- 9:30 - 10:10 **Marko Marhl** (University of Maribor)
Signal transduction in cells and tissues
- 10:10 - 10:30 **Atushi Tanaka** (Tokyo Metropolitan University)
Cheon's quasienergy and eigenspace anholonomies in quantum maps
- 10:30 - 11:00 Coffee break

Chair: **Mikito Toda**

- 11:00 - 11:30 **Akira Shudo** (Tokyo Metropolitan University)
Exact WKB analysis for the multilevel non-adiabatic transition problem
- 11:30 - 12:10 **Dean Korosak** (University of Maribor)
Network modeling of complex systems
- 12:10 - 12:30 **Ayumu Sugita** (Osaka City University)
Entanglement measures and generalized Husimi function
- 12:30 - 14:00 Lunch

Chair: **Marko Robnik**

- 14:00 - 14:30 **Kazuyuki Aihara** (University of Tokyo)
Nonlinear dynamics and control of prostate cancer
- 14:30 - 15:00 **Martin Horvat** (University of Ljubljana)
Ergodic properties of the triangle map
- 15:00 - 15:30 **Yoji Aizawa** (Waseda University)
Weibull distributions in the multi-agent model for financial markets
- 15:30 - 16:10 **Yoshiki Kuramoto** (ATR Wave Engineering Laboratories)
Double phase reductions for large populations of oscillators with noise
- 16:10 - 16:30 Coffee break
- 16:30 - 18:30 Poster session
- 19:00 - 21:30 Banquet

November 14 (Wednesday)

Chair: **Kazuo Takatsuka**

9:00 - 9:30 **Yoshihiro Yamazaki** (Waseda University)
Reconstruction and extension of the Family-Vicsek scaling hypothesis for growing rough interfaces

9:30 - 10:10 **Primoz Potocnik** (University of Ljubljana)
Forecasting applications for energy market

10:10 - 10:30 **Naoya Fujiwara** (Kyoto University)
Characterization of spatial structures in a non-autonomous dynamical system

10:30 - 11:00 Coffee break

Chair: **Takahisa Harayama**

11:00 - 11:30 **Takashi Odagaki** (Kyushu University)
Self-organization of hierarchy and villages

11:30 - 12:10 **Tomaz Prosen** (University of Ljubljana)
Quantum chaos in systems of many particles

12:10 - 12:30 **Takuma Akimoto** (Waseda University)
Generalized arcsine law in infinite measure dynamical systems

12:30 - 14:00 Lunch

Chair: **Yoji Aizawa**

14:00 - 14:30 **Taksu Cheon** (Kochi University of Technology)
Quantum games - Bayesian Nash equilibria and Bell inequalities

14:30 - 15:00 **Katsuhiko Nakamura** (Osaka City University)
Quantum transport in networks: Effect of topology, defects and nonlinearity

15:00 - 15:40 **Marko Robnik** (University of Maribor)
New results in quantum chaos of generic systems

15:40 - 16:00 **Yoji Aizawa**
Closing address