

# Winter Workshop on Dynamical systems

Date: Jan 5 (Friday) - Jan 8 (Monday), 2024

Venue: Layup Miyukicho Build. room 6-D, Miyukicho, Aoi Ward, Shizuoka, 420-0857

	Friday 5	Saturday 6	Sunday 7	Monday 8
9:45 - 10:30	-	Motomasa Komuro	Masato Hara	Yuki Takahashi
10:45 - 11:30	-	Jin Hatamoto	Kazuyuki Yagasaki	Hiroki Takahasi
13:30 - 14:15	-	Short Comm.	Yuxuan Liu	-
14:30 - 15:15	Yushi Nakano	Short Comm.	Neil Dobbs	-
15:30 - 16:15	Toru Sera	Koichi Hiraide	Shoya Motonaga	-
16:30 - 17:15	Nima Alibabaei	Shin Kiriki	Short Comm.	-

## Jan 5 (Friday)

- 14:30 – 15:15 Yushi Nakano (Tokai University)  
Quasi-limit theorems in open dynamical systems
- 15:30 – 16:15 Toru Sera (Osaka University)  
Large deviation estimates related to arcsine laws for intermittent maps
- 16:30 – 17:15 Nima Alibabaei (Kyoto University)  
Weighted topological entropy and Hausdorff dimension

## Jan 6 (Saturday)

- 9:45 – 10:30 Motomasa Komuro (University of Tokyo)  
On bifurcation of coupled sin-circle maps (5)
- 10:45 – 11:30 Jin Hatamoto (National Institute of Technology, Tokyo College)  
Poisson limit distribution for diffeomorphisms with weak hyperbolic product structure
- 13:30 – 15:15 Short Communications  
Nanami Higuchi (Ochanomizu University)  
Existence of Maximizing Measures for Bowen potentials on Countable Markov Shifts  
Mai Oguchi (Ochanomizu University)  
On the specification property for  $(\alpha, \beta)$ -transformations  
Hajime Tateishi (Kyoto University)  
Non-existence of invariant curves of billiard systems  
Tomoharu Suda (RIKEN)  
Generalizing concepts in dynamical systems  
Taiga Kurokawa (Kyoto University)  
A new variational structure for endpoints energy constrained two-point boundary value problems in non-autonomous Lagrangian systems

- 15:30 – 16:15 Koichi Hiraide (Osaka Metropolitan University)  
Rapid deterioration of convergence in Taylor expansions of linearizing maps for quadratic maps at saddle fixed points
- 16:30 – 17:15 Shin Kiriki (Tokai University)  
Robust pluripotency of wandering dynamics

### Jan 7 (Sunday)

- 9:45 – 10:30 Masato Hara (Kyoto University)  
Learning dynamics by reservoir computing
- 10:45 – 11:30 Kazuyuki Yagasaki (Kyoto University)  
Solvability of integrable partial differential equations under meromorphic initial conditions by quadrature
- 13:30 – 14:15 Yuxuan Liu (Kyushu University)  
Exponential mixing for  $C^{1+\alpha}$   $U(1)$ -extensions with discontinuities
- 14:30 – 15:15 Neil Dobbs (University College Dublin)  
Optimal bounds for the Hausdorff dimension of some quadratic Julia sets
- 15:30 – 16:15 Shoya Motonaga (Ritsumeikan University)  
Duality principle in ergodic optimization and thermodynamic formalism
- 16:30 – 17:15 Short Communications  
Joowan Park (Kyushu University)  
Critical polyratio and core entropy  
Mitsuru Shibayama (Kyoto University)  
On the last KAM curve around an elliptic fixed point of area-preserving maps  
Yoshiki Takeguchi (Kyoto University)  
Design of optimal spacecraft trajectories by using dynamical systems theory

### Jan 8 (Monday)

- 9:45 – 10:30 Yuki Takahashi (Saitama University)  
On the dimension of projective Iterated Function Systems
- 10:45 – 11:30 Hiroki Takahashi (Keio University)  
High complexity ergodic optimization for the Dyck-Motzkin shifts

---

Organizer: Zin Arai (zin@c.titech.ac.jp)