

# Research on Complex Dynamics and Related Fields (Celebrating Prof. Shigehiro Ushiki's 60th birthday) Conference

The following conference is hosted by RIMS (Research Institute of Mathematical Science) of Kyoto University. In this conference, we celebrate Professor Shigehiro Ushiki (Kyoto University, Graduate School of Human and Environmental Studies) 's 60th birthday.

Organizer: Hiroki Sumi (Osaka University)

Date : December 6, 2010, 13:30– December 10, 2010, 12:30.

Place : No. 110 room, Department of Mathematics, Science Building No. 3, Kyoto University. Kitashirakawa-Oiwake cho, Sakyo-ku, Kyoto. (Kyoto city bus, Hyakumanben or Kyodai-Nogakubumae bus stop)

## Program

December 6

13:30–14:30

Gohei Tanaka (Univ. Tokyo)  
Nonlinear information processing with complex-valued neural networks

14:45–15:45

Teisuke Jin (Kyoto Univ.)  
Dynamics of the Hénon map: Nevanlinna Theory

16:00–17:00

Keisuke Uchimura (Tokai Univ.)  
Dynamics of Generalized Chebyshev Maps

December 7

10:15–10:45

Koh Katagata (National College of Tech.)  
Limits of entire functions with respect to some metric

11:00–11:30

Shunsuke Morosawa (Kochi Univ.)  
Some questions of Schröder functions

13:30–14:30

Masashi Kisaka (Kyoto Univ., Grad. School of Human and Environmental Studies)  
Smoothness of hairs for some transcendental entire functions

14:45–15:45

Hiroyuki Inou (Kyoto Univ.)  
Holomorphic index and parabolic renormalization

16:00–17:00

Tomoko Shinohara (Tokyo Metropolitan College of Industrial Technology)  
Locally maximal invariant set at a fixed indeterminate point

December 8

9:30–10:30

Kohei Ueno (Toba National College of Maritime Technology)  
Symmetries of Julia sets of polynomial skew products on  $\mathbb{C}^2$

- 10:45–11:45 Keiji Ogiso (Osaka Univ.)  
Entropy of automorphisms of compact hyperKähler manifolds
- 13:30–14:30 Hiroki Sumi (Osaka Univ.)  
Cooperation principle and density of stable systems in random complex dynamics
- 14:45–15:45 Eric Bedford (Indiana Univ.)  
Linear fractional recurrences as birational maps of 3-space: Periodicities and pseudo-automorphisms of positive entropy
- 16:00–17:00 Shigehiro Ushiki (Kyoto Univ., Grad School of Human and Environmental Studies)  
Exploration of complex Hénon dynamics
- 18:00– Party (celebrating Prof. Ushiki’s 60th birthday) at Kyoto Univ. Clock Tower Centennial Hall Kokusai-Koryu Hall III
- December 9
- 10:30–11:00 Mitsuhiro Imada (Tokyo Institute of Technology)  
Periodic points on the boundaries of rotation domains
- 11:25–12:25 Shizuo Nakane (Tokyo Polytechnic Univ.)  
Postcritical sets and saddle basic sets for Axiom A polynomial skew products on  $\mathbb{C}^2$
- 14:00–15:00 Mitsuhiro Shishikura (Kyoto Univ.)  
A case study of an application of Thurston’s theorem
- 15:15–16:15 Tetsuo Ueda (Kyoto Univ.)  
Critically finite maps on projective spaces
- 16:30–17:30 Taro Asuke (Univ. of Tokyo)  
On Fatou-Julia decompositions
- December 10
- 10:15–11:15 Zin Arai (Hokkaido Univ.)  
Monodromy and bifurcations of the Hénon map
- 11:30–12:30 John Hubbard (Cornell Univ.)  
Topological models for complex Hénon mappings: the pinched ball model (joint work with Remus Radu and Raluca Tanase)

For the newest version of the program, see the following webpage:

<http://www.math.sci.osaka-u.ac.jp/~sumi/cpxdyn10meeting.html>.

If you would like to participate in the party (December 8), please send an e-mail with your name, affiliation, and e-mail address, to Hiroki Sumi: [sumi\(AT\)math.sci.osaka-u.ac.jp](mailto:sumi(AT)math.sci.osaka-u.ac.jp).

Date: December 4, 2010.