

# Integrated Research on Complex Dynamics

## Conference

The following conference is hosted by RIMS (Research Institute for Mathematical Sciences) of Kyoto University.

Organizer: Hiroki Sumi (Osaka University)

Date : January 23, 2012, 14:45– January 27, 2012, 12:15.

Place : No. 420 room, Research Institute for Mathematical Sciences, Kyoto University.

Kitashirakawa-Oiwake cho, Sakyo-ku, Kyoto. (Kyoto city bus, “Kyodai-Nogakubumae” or “Kitashirakawa” bus stop)

### Program

January 23

14:45–15:45

Tomoko Shinohara (Tokyo Metropolitan College of Industrial Technology)  
Indeterminacy sets of rational maps and dimension of the invariant sets

16:00–17:00

Volodymyr Nekrashevych (Texas A & M Univ. )  
Symbolic dynamics and self-similar groups

January 24

9:45–10:45

Koh Katagata (National College of Tech.)  
Qualitative theory of differential equations and complex dynamics

11:00–12:00

Shunsuke Morosawa (Kochi Univ.)  
Residual Julia sets of Blaschke products

13:30–14:30

Mitsuhiro Shishikura (Kyoto Univ.)  
A proof of Jacobson’s theorem by using the Yoccoz puzzle

14:45–15:45

Kohei Ueno (Toba National College of Maritime Technology)  
Dynamics and weights of polynomial skew products on  $\mathbb{C}^2$

16:00–17:00

Yusuke Okuyama (Kyoto Institute of Tech.)  
The density problem on repelling periodic points of non-archimedean rational functions

January 25

9:10–9:30

Hirokazu Shimauchi (Tohoku Univ.)  
On the coefficients of the Riemann mapping function for the exterior of the Mandelbrot set

9:45–10:45

Yasuaki Hiraoka (Kyushu Univ. IMI)  
Rational maps and maximum likelihood decodings

- 11:00–12:00 Takato Uehara (Tohoku Univ.)  
On rational surface automorphisms
- 13:30–14:30 Keiji Oguiso (Osaka Univ.)  
Quartic K3 surfaces and Cremona transformations - around a question of Professor Igor Dolgachev
- 14:45–15:45 Shigehiro Ushiki (Kyoto Univ. Human and Environmental Studies)  
Critical points and Julia sets for complex Hénon maps
- 16:00–17:00 Tetsuo Ueda (Kyoto Univ.)  
Semi-parabolic implosion in two complex variables
- January 26
- 9:45–10:45 Hiroyuki Inou (Kyoto Univ.)  
"Cut-open" rabbit in parameter spaces
- 11:00–12:00 Tomoki Kawahira (Nagoya Univ.)  
Riemann surface laminations generated by complex dynamical systems
- 13:30–14:30 Shizuo Nakane (Tokyo Polytechnic Univ.)  
On saddle basic sets for Axiom A polynomial skew products on  $\mathbb{C}^2$
- 14:45–15:45 Taro Asuke (Univ. of Tokyo)  
Independence and non-triviality of rigid second complex characteristic classes
- 16:00–17:00 Teisuke Jin (Kyoto Institute of Tech.)  
Dynamics of Hénon map: Nevanlinna theory
- January 27
- 9:15–9:45 Shota Kojima (Rikkyo Univ.)  
Extreme values of infinite compositions of quadratic polynomials
- 10:00–11:00 Yasushi Yamashita (Nara Woman's Univ.)  
A computer experiment on primitive stable representations
- 11:15–12:15 Hiroki Sumi (Osaka Univ.)  
Stability, bifurcation and classification of minimal sets in random complex dynamics

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

<http://www.math.sci.osaka-u.ac.jp/~sumi/cpxdyn11meetinge.html>.

If you would like to participate in the party (January 25, evening), please send an e-mail with your name, affiliation, and e-mail address, to Hiroki Sumi: sumi(AT) math.sci.osaka-u.ac.jp.

Date: January 17, 2012.