

複素力学系の分岐と安定性の研究 (Bifurcation and stability in complex dynamics)

Dates: December 9 (Mon) 10:30 – December 13 (Fri) 13:00, 2019

Place: Room 111 in RIMS, Kyoto University

Organizers: Yūsuke Okuyama (Kyoto Institute of Technology, chair)

Mitsuhiro Shishikura (Kyoto University)

PROGRAM

December 9 (Mon)

10:30 – 11:00

Yūsuke Okuyama (Kyoto Institute of Technology)

A big Brody-type hyperbolicity in Berkovich dynamics

11:15 – 11:45

Koh Katagata (Ichinoseki National College of Technology)

Transcendental entire functions whose Julia sets contain any infinite collection of quasiconformal copies of quadratic Julia sets

13:30 – 14:30

Yutaka Ishii (Kyusyu University)

Homotopy Hubbard trees and automata

14:45 – 15:45

Xun Yu (Tianjin University)

Coble's question and complex dynamics of inertia groups on K3 surfaces

16:00 – 17:00

Takato Uehara (Okayama University)

Dynamical degrees of birational maps on complex surfaces

December 10 (Tue)

9:30 – 10:30

Mathieu Astorg (Université d'Orléans)

The first talk: Parabolic implosion in dimension 1

10:45 – 11:45

Jorge Mello (University of New South Wales)

On canonical height functions and dynamics

13:30 – 14:30

Tetsuo Ueda (Kyoto University)

Semi-parabolic fixed points and their bifurcations in complex dimension 2

14:45 – 15:45

Eric Bedford (Stony Brook University)

Dynamics of rational surface automorphisms: an expository talk

16:00 – 17:00

Hiroki Sumi (Kyoto University)

Random holomorphic dynamical systems associated with analytic families of holomorphic maps

December 11 (Wed)

9:30 – 10:30

Patrick Ingram (York University)

Arithmetic of critical orbits I: PCF maps in one variable and the critical height

- 10:45 – 11:45 Matthieu Astorg (Université d’Orléans)
The second talk: Construction of wandering domains using Lavaurs maps with an attracting fixed point
- 13:30 – 14:30 Reimi Irokawa (Tokyo Institute of Technology)
Stabilities for families of dynamics over non-archimedean fields
- 14:45 – 15:45 Tien Cuong Dinh (National University of Singapore)
The Mandelbrot set is the shadow of a Julia set
- 15:55 – 16:55 Shou Yoshikawa (University of Tokyo)
Equivariant MMP and Kawaguchi-Silverman conjecture for endomorphisms on rationally connected varieties admitting an int-amplified endomorphism
- 17:10 – 17:50 [In Math Department, Room 108]
Poster Session

December 12 (Thr)

- 9:30 – 10:30 Matthieu Astorg (Université d’Orléans)
The third talk: The case when the Lavaurs map has a Siegel fixed point
- 10:45 – 11:45 Patrick Ingram (York University)
Arithmetic of critical orbits II: variants of the critical height on subvarieties of moduli space
- 13:30 – 14:30 Takahiro Shibata (National University of Singapore)
Non-density of points of small arithmetic degrees
- 14:45 – 15:45 Keiji Oguiso (University of Tokyo)
Non-finite generation problem of the discrete automorphism groups of smooth projective varieties
- 16:00 – 17:00 Shizuo Nakane (Tokyo Polytechnic University)
Finger-like structures in polynomial skew products

December 13 (Fri)

- 9:30 – 10:30 Patrick Ingram (York University)
Arithmetic of critical orbits III: the critical height for endomorphisms of \mathbb{P}^N
- 10:45 – 11:45 Toshi Sugiyama (Gifu Pharmaceutical University)
The moduli space of polynomial maps having multiple fixed points and their holomorphic indices of fixed points
- 12:00 – 13:00 Hiroyuki Inou (Kyoto University)
An infinitely renormalizable cubic polynomial and its combinatorial class

(以上)