

# 離散群と双曲空間の複素解析とトポロジー

## Complex Analysis and Topology of Discrete Groups and Hyperbolic Spaces

京都大学数理解析研究所の共同研究事業の一つとして、下記のように研究集会を催しますので、ご案内申し上げます。

研究代表者: 藤井道彦 (京都大学・理学研究科)

記

日時: 2014年1月20日(月) 13:30 ~ 1月24日(金) 12:20

場所: 京都大学数理解析研究所 111号室

Room 111, RIMS, Kyoto University

京都市左京区北白川追分町

市バス 京大農学部前 または 北白川 下車

プログラム

1月20日(月曜日) Mon, Jan. 20

13:30 ~ 14:20 齋藤恭司 (Kyoji Saito) (IPMU, Univ.Tokyo)

Monoid of integral square matrices and Euler product of its skew-growth function

14:30 ~ 15:20 松森至宏 (Yoshihiro Matsumori) (IIC Partners co.,ltd.)

Growth series for Artin monoids and related combinatorial identities

15:40 ~ 16:30 小森洋平 (Yohei Komori) (Waseda Univ.)

On degenerate families of Riemann surfaces over elliptic curves

1月21日(火曜日) Tue, Jan. 21

9:30 ~ 10:20 山下靖 (Yasushi Yamashita) (Nara Women's Univ.)

Non-hyperbolic automatic groups and groups acting on CAT(0) cube complex

10:40 ~ 11:30 島田伊知朗 (Ichiro Shimada) (Hiroshima Univ.)

Borcherds method and automorphism groups of K3 surfaces

13:30 ~ 14:20 阿部隆次 (Ryuji Abe) (Tokyo Polytech.Univ.)

A characterization of simple closed geodesics in the Borromean rings complement

14:30 ~ 15:20 伊藤哲也 (Tetsuya Itoh) (RIMS)

Why are the Dehornoy ordering of braids so interesting ?

15:40 ~ 16:30 Greg McShane (Fourier Inst.)

Volume of three manifolds and dilatation of pseudo Anosovs

**1月22日(水曜日) Wed, Jan. 22**

9:30 ~ 10:20 吉永正彦 (Masahiko Yoshinaga) (Hokkaido Univ.)

Milnor fibers of real line arrangements

10:40 ~ 11:30 佐藤正寿 (Masatoshi Sato) (Gifu Univ.)

A minimal generating set of the level 2 mapping class group of a non-orientable surface

13:30 ~ 14:20 小林竜馬 (Ryoma Kobayashi) (Tokyo Univ. of Science)

A finite presentation of the level 2 principal congruence subgroup of  $GL(n; \mathbf{Z})$

14:30 ~ 15:20 湯浅亘 (Wataru Yuasa) (Tokyo Tech.)

Hyperelliptic Goldman Lie algebra and its abelianization

15:40 ~ 16:30 Greg McShane (Fourier Inst.)

Lengths of simple geodesics, identities and applications

**1月23日(木曜日) Thu, Jan. 23**

9:30 ~ 10:20 藤井道彦 (Michihiko Fujii) (Kyoto Univ.)

On geodesic representatives of elements of braid groups

10:40 ~ 11:30 井口雄紀 (Yuki Iguchi) (Tokyo Tech.)

On the boundary behavior of Teichmüller geodesics

13:30 ~ 14:20 嶺山良介 (Ryosuke Mineyama) (Osaka Univ.)

The limitset of a Coxeter group and a Cannon-Thurston map

14:30 ~ 15:20 中西敏浩 (Toshihiro Nakanishi) (Shimane Univ.)

Rank two free group and McShane identities

15:40 ~ 16:30 秋吉宏尚 (Hirotaka Akiyoshi) (Osaka City Univ.)

Towards the variation of Jorgensen's theory for the torus with a single cone point

**1月24日(金曜日) Fri, Jan. 24**

9:30 ~ 10:20 Sang-hyun Kim (KAIST)

Anti-trees and right-angled Artin subgroups of braid groups

10:30 ~ 11:20 大鹿健一 (Ken'ichi Ohshika) (Osaka Univ.)

Automorphism groups of Heegaard splittings and their actions

11:30 ~ 12:20 河澄響矢 (Nariya Kawazumi) (Univ. of Tokyo)

The Goldman-Turaev Lie bialgebra and the mapping class group

(12月24日作成)