Toyama Workshop on Quantum Groups and Related Topics 2024

DATE From September 14th to September 16th

PLACE 〒930-8555 富山県富山市五福 3190　富山大学 理学部 B121

3190 Gofuku, Toyama-shi, Toyama 930-8555, JAPAN

B121 Room, School of Science Bldg.(*E zone*), University of Toyama

Organizers Hiroyuki Yamane (University of Toyama)

Taiki Shibata (Okayama University of Science)

Program

September 14 (Sat.)

09:00–11:00 —**Free discussion**—

11:00–11:50 —**Registration**—

11:50–12:00 —**Opening**—

12:00–12:50 **Hiroyuki Yamane (University of Toyama) 山根 宏之（富山大学）**

Matrices of irreducible representations of binary polyhedral groups

13:00–13:50 **Yoshiyuki Koga (University of Fukui) 古閑 義之（福井大学）**

The center of the universal enveloping algebra of the nilpotent Lie superalgebra $\mathfrak{sl}(m,1)^+$

14:00–14:50 **Soichi Okada (Nagoya University) 岡田 聡一（名古屋大学）**

Algebraic structures associated with the Young-Fibonacci lattice

15:00–15:50 **Takeyoshi Kogiso (Josai University) 小木曽 岳義（城西大学）**

Several aspects of subHankel determinant

16:00–16:50 **Md Rashed Talukder (Shahjalal University of Science and Technology)**

Standard Topological Quasi-varieties Generated by Small Topological Structures

17:00–17:50 **Shamsun Naher Begum (Shahjalal University of Science and Technology)**

Construction of JP-semilattices and its characterizations

September 15 (Sun)

09:00–09:20	**Rikushi Suzuki (University of Toyama) 鈴木 陸史（富山大学）** 回転群について（連続群論入門（杉浦・山内著）からの抜粋）
09:30–09:50	**Masatake Maruyama (University of Toyama) 丸山 政武（富山大学）** Non-existence of non-trivial ideals in simple Lie superalgebras even ignoring the $\mathbb{Z}_2$-structure —from Prop. 1.75 of Infinite-Dimensional Lie Algebras (M. Wakimoto)
10:00–10:20	**Nagatoshi Sasano (Ryukoku University) 佐々野 詠淑（龍谷大学）** Construction of larger Lie algebras with bilinear forms from smaller ones
10:30–10:50	**Makoto Kodaira (Shibaura Institute of Technology)** **小平 誠（芝浦工業大学）** Benford's law in the natural density of primes and its generalization
11:00–11:20	**Kenta Suzuki (University of Tsukuba) 鈴木 健太（筑波大学）** Smoothness of commutative Hopf algebras not necessarily of finite type
11:30–11:50	**Liu Kaifan (University of Tsukuba)** A Galois Correspondence for SUSY Function Fields of Locally Algebraic Group Superscheme in Positive Characteristic
12:00–13:30	**—Lunch お昼休み—**
13:30–13:50	**Rei Sugitani (University of Tsukuba) 杉谷 礼（筑波大学）** Coideal subalgebras of $\overline{\mathcal{O}}_q(\mathrm{SL}_2)$
14:00–14:20	**Daisuke Nakamura (Okayama University of Science)** **中村 大祐（岡山理科大学）** Simple $u_q(\mathfrak{sl}_2)$-comodule algebras and categories of modules over them
14:30–14:50	**Ryota Wakao (Okayama University of Science) 若尾 亮太（岡山理科大学）** On super-forms of low dimensional semisimple Hopf algebras
15:00–15:20	**Teerapong Chaochanglek (Chulalongkorn University, Kanazawa University)** Weight enumerators of Type II codes
15:30–15:40	**—Break 小休憩—**
15:40–16:00	**Williams Chiari (Kanazawa University)** Neighbors and Weight Enumerators of Type II Codes
16:10–16:30	**A.K.M. Selim Reza** **(Khulna University of Engineering & Technology, Kanazawa University)** Weight Enumerators of codes over $\mathbb{F}_2$ and over $\mathbb{Z}_4$
16:40–17:00	**Hin Wang NG (Shibaura Institute of Technology) 伍 軒宏 （芝浦工業大学）** Pivotal exact module categories over $\mathrm{Rep}(u_q(\mathfrak{sl}_2))$

September 16 (Mon.)

09:00–09:50 **Yohei Ota (Tokyo Institute of Technology)**

太田 洋平（東京工業大学）

On the Quantum Groupoid Structure of the Heisenberg Double of $U_\hbar(\mathfrak{b}_+)$

10:00–10:50 **Taiki Shibata (Okayama University of Science)**

柴田 大樹（岡山理科大学）

On a certain description of the parameter set of irreducible modules for algebraic supergroups

11:00–11:50 **Kenichi Shimizu (Shibaura Institute of Technology)**

清水 健一（芝浦工業大学）

Modularity of the category of local modules

12:00–12:10 **—Closing—**

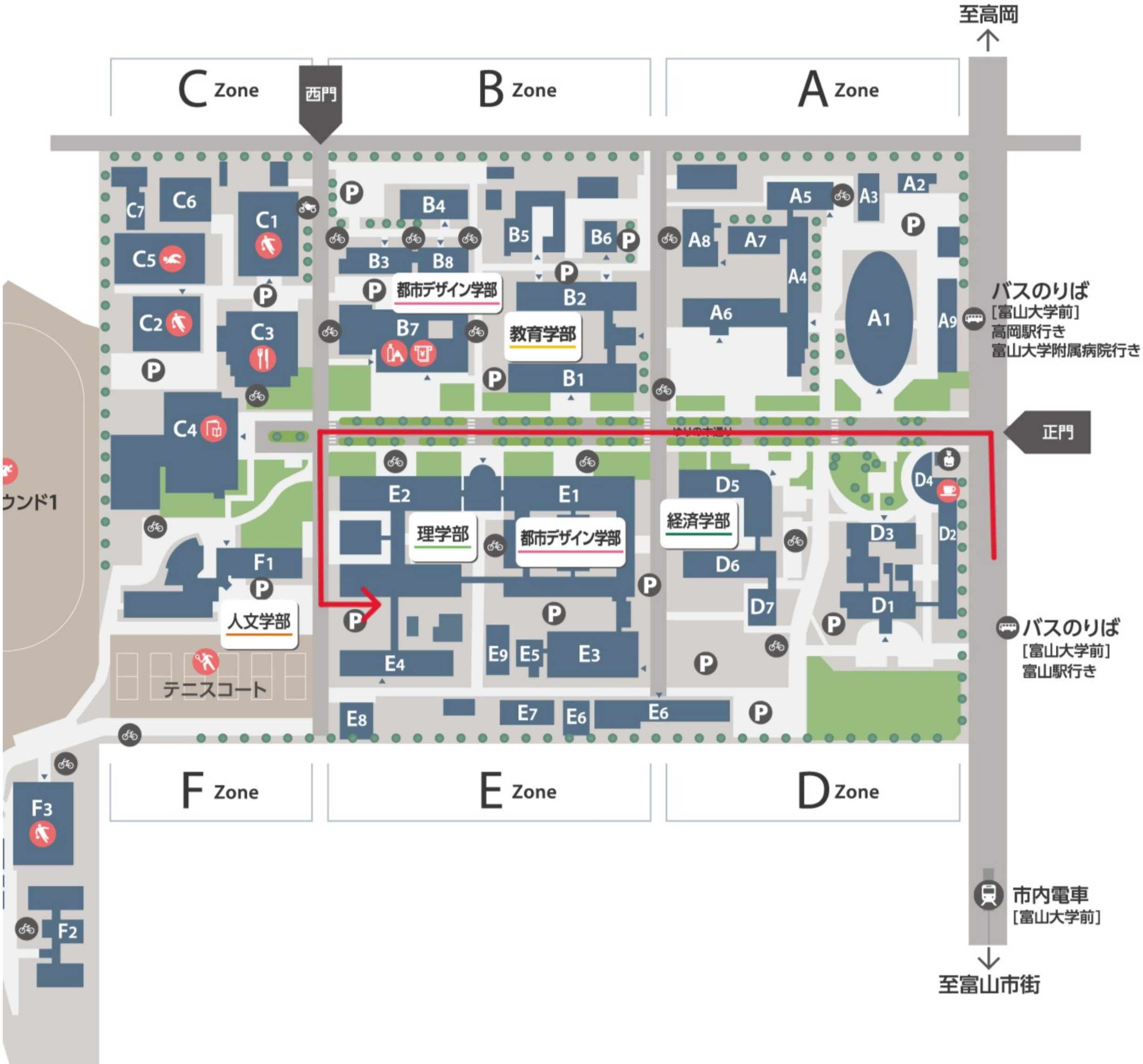
Acknowledgment

当研究集会は，JSPS 科研費 基盤研究 (C) 22K03225（研究代表者：山根 宏之），JSPS 若手研究 科研費 22K13905（研究代表者：柴田 大樹）からの支援を受けています．

Campus Map

集会中は休日ですので，扉にはロックがしてあります．下に示す地図の「赤い矢印」に従って進んでください．到着したところの「地図上側の建物 1 階」が研究集会の会場ですので，その中にいるどなたかが内側から鍵を開けてくれるはずです．

Since all the days during the workshop are holidays, the doors will be locked. Please follow the red arrow on the map below. When you reach the end of the red arrow, the venue will be on the first floor of the building on your left. Someone inside should unlock the door for you once you arrive ;)



富山大学キャンパスマップは以下からご覧になれます．

You are able to check the University of Toyama campus map from the link below.

`https://www.u-toyama.ac.jp/access/campus-access/gofuku/#gofuku06`