

# Combinatorial Reconfiguration Workshop 2024 (Fukuoka, Japan)

## October 7 (Mon.)

| live<br>streamed? | JST: UTC+9 |        | Talks  |
|-------------------|------------|--------|--|
|                   | start      | finish |  |
| --                | 10:00      | 10:30  | Opening, and self-introduction by participants   |
| Yes               | 10:30      | 11:00  | Manoj Belavadi, Kathie Cameron, Ni Luh Dewi Sintiari<br>Recoloring via modular decomposition                                     |
| Yes               | 11:00      | 11:30  | Lucas De Meyer, Frantisek Kardos, Aurélie Lagoutte, Guillem Perarnau<br>Edge-recoloring with non-increasing potential            |
| --                | 11:30      | 13:00  | Lunch on your own  |
| Yes               | 13:00      | 14:00  | [Invited Talk] Jean Cardinal<br>Shortest paths on polymatroids and hypergraphic polytopes  |
| --                | 14:00      | 14:15  | Break (15 min)   |
| Yes               | 14:15      | 14:45  | Tesshu Hanaka, Yuni Iwamasa, Yasuaki Kobayashi, Yuto Okada, Rin Saito<br>Basis sequence reconfiguration in the union of matroids |
| Yes               | 14:45      | 15:15  | Petr Gregor, Hung P. Hoang, Arturo Merino, Ondřej Mička<br>Generating all invertible matrices by row operations                  |
| --                | 15:15      | 15:30  | Break (15 min)   |
| --                | 15:30      | 17:30  | Open problem session / Working session   |

## October 8 (Tue.)

|     |       |       |  |
|-----|-------|-------|--|
| Yes | 10:00 | 10:30 | Takehide Soh, Takumu Watanabe, Jun Kawahara, Akira Suzuki, Takehiro Ito<br>On scalable hard instances for independent set reconfiguration  |
| Yes | 10:30 | 11:00 | Dong Yang, Yuya Yamada, Mutsunori Banbara, Katsumi Inoue, Torsten Schaub, Ryuhei Uehara<br>Combinatorial reconfiguration with answer set programming: System recongo and some experimental results |
| Yes | 11:00 | 11:30 | [Mentoring] Kazuki Takada, Dong Yang, Mutsunori Banbara<br>Pareto-optimal combinatorial reconfiguration considering cost and length based on answer set programming                                |
| --  | 11:30 | 13:00 | Lunch on your own  |
| Yes | 13:00 | 14:00 | [Invited Talk] Naoto Ohsaka<br>On the complexity of approximating reconfiguration problems   |
| --  | 14:00 | 14:15 | Break (15 min)   |
| Yes | 14:15 | 14:45 | Mario Grobler, Stephanie Maaz, Nicole Megow, Amer E. Mouawad, Vijayaragunathan Ramamoorthi, Daniel Schmand,<br>Sebastian Siebertz<br>Solution discovery via reconfiguration for problems in P      |
| Yes | 14:45 | 15:15 | Henning Fernau, Kevin Mann<br>How to reconfigure your alliances  |
| --  | 15:15 | 15:30 | Break (15 min)   |
| --  | 15:30 | 17:30 | Open problem session / Working session   |

### October 9 (Wed.)

| live<br>streamed? | JST: UTC+9 |        | Talks  |
|-------------------|------------|--------|--|
|                   | start      | finish |  |
| Yes               | 10:00      | 10:30  | Naonori Kakimura, Yuta Mishima<br>Reconfiguring labeled matchings in triangular grid graphs                                  |
| Yes               | 10:30      | 11:00  | Tatsuhiro Suga, Akira Suzuki, Yuma Tamura, Xiao Zhou<br>Independent set reconfiguration under extended reconfiguration rules |
| Yes               | 11:00      | 11:30  | Akihiro Yamamura, Tatiana B. Jajcayova<br>Rearrangement problem of bicolor arrays by prefix reversals                        |
| --                | 11:30      | 13:00  | (Group photo)<br>Lunch on your own   |
| --                | 13:00      | 17:30  | Social event   |

### October 10 (Thur.)

|     |       |       |   |
|-----|-------|-------|---|
| Yes | 10:30 | 11:00 | [Mentoring] Takahiro Suzuki<br>Dominating set reconfiguration under extended token sliding                          |
| Yes | 11:00 | 11:30 | [Mentoring] Rikuto Kawana, Rin Saito, Takehiro Ito<br>A new optimization variant of independent set reconfiguration |
| --  | 11:30 | 13:00 | Lunch on your own   |
| Yes | 13:00 | 14:00 | [Tutorial Talk] Akira Suzuki<br>Combinatorial reconfiguration applied to power distribution systems                 |
| --  | 14:00 | 14:15 | Break (15 min)  |
| --  | 14:15 | 17:30 | Open problem session / Working session  |

### October 11 (Fri.)

|    |       |       |  |
|----|-------|-------|--|
| -- | 10:00 | 11:30 | Open problem session / Working session |
| -- | 11:30 | 12:00 | Closing                                |

invited talk including discussion = 60 minutes each  
contributed/mentoring talk including discussion = 30 minutes each