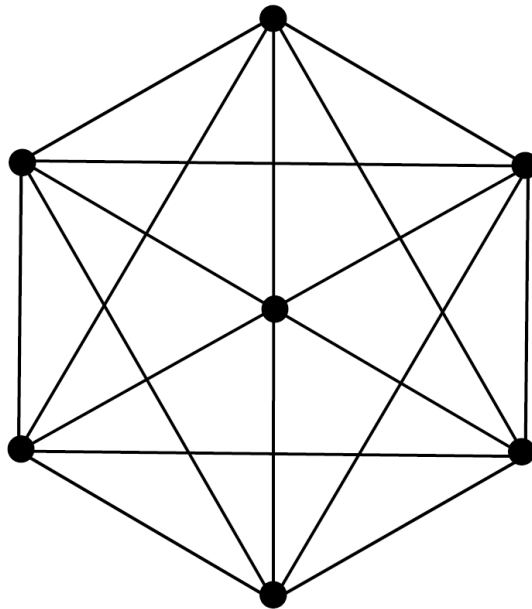


# TGT30

## 30<sup>th</sup> Workshop on Topological Graph Theory

Yokohama National University, Japan  
Hatoba Hall, October 24 to 26, 2018



Does this have a finite planar covering?

# TGT 30

## 30<sup>th</sup> Workshop on Topological Graph Theory

### **Conference Venue**

Hatoba Hall, 1-1, Kaigann do-ri, Naka-ku, Yokohama, Japan 231-0002

### **Invited Speaker**

Marston Conder (The University of Auckland, New Zealand)

Gašper Fijavž (University of Ljubljana, Slovenia)

Ken-ichi Kawarabayashi (National Institute of Informatics, Japan)

Roman Nedela (University of West Bohemia, Czech Republic)

Hehui Wu (Fudan University, China)

Xuding Zhu (Zhejiang Normal University, China)

### **Organizers**

Seiya Negami (Yokohama National University)

Atsuhiko Nakamoto (Yokohama National University)

Kenta Ozeki (Yokohama National University)

Naoki Matsumoto (Seikei University)

Gen Kawatani (Tokyo University of Science)

### **Sponsored by**

Faculty of Environment and Information Sciences, Yokohama

National University

Yokohama Convention & Visitors Bureau

## DAY 1 – October 24 (Wed.)

9:15 Registration

9:45 Opening remarks

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9:50 – 10:10 Kenta Ozeki (Yokohama National University)

*The Hamiltonicity of line graphs of 3-hypergraphs*

10:10 – 10:30 Kengo Enami (Yokohama National University)

*Inequivalent embeddings of 2-regular diplanar digraphs*

10:30 – 10:50 Gen Kawatani (Tokyo University of Science)

*Clockwise labeling of embedded regular graphs*

10:50 – 11:10 Terukazu Sano (National Institute of Technology, Kisarazu College)

*A note on the tree-arboricity of graphs on closed surfaces*

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Coffee Break

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11:25 – 12:15 Marston Conder (University of Auckland)

*New methods for finding minimum genus embeddings of graphs*

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Lunch

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14:10 – 15:00 Roman Nedela (University of West Bohemia)

*Graph coverings and harmonic morphism of graphs*

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Coffee Break

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15:15 – 15:40 Peter Zeman (Charles University)

*Jordan-like characterization of automorphism groups of planar graphs*

15:40 – 16:05 Olivia Jeans (The Open University)

*Möbius regularity and external symmetries of regular maps on linear fractional groups*

16:05 – 16:30 Hideaki Morita (Muroran Institute of Technology)

*Three expressions of combinatorial zeta functions*

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Coffee Break

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16:45 – 17:05 Kenta Noguchi (Tokyo University of Science)

*Re-embedding an optimal 1-planar graph into a triangulation or a quadrangulation*

17:05 – 17:25 Seiya Negami (Yokohama National University)

*Oriented triad colorings of triangulations on closed surfaces*

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17:45 – 20:00 Welcome Reception at Hatoba Hall

## DAY 2 – October 25 (Thu.)

9:05 Registration

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9:20 – 9:40 Naoki Mochizuki (Yokohama National University)

*Minimum-length embeddings of graphs on the torus and their circle packings*

9:40 – 10:00 Naoki Matsumoto (Seikei University)

*Bichromatic coloring game on triangulations with few inner points*

10:00 – 10:20 Sho Kubota (Tohoku University)

*Periodicity of Grover walks on jointed graphs*

10:20 – 10:45 Etsuo Segawa (Yokohama National University)

*Reproductive property of Grover walk*

10:45 – 11:10 Katie Clinch (University of Tokyo)

*Symmetric Rigidity Theory*

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Coffee Break

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11:25 – 12:15 Ken-ichi Kawarabayashi (National Institute of Informatics)

*Directed Graph Minors*

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Lunch

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14:10 – 15:00 Xuding Zhu (Zhejiang Normal University)

*A refinement of choosability of graphs*

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Coffee Break

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15:15 – 15:40 Seog-Jin Kim (Konkuk University)

*Signed coloring of  $k$ -chromatic graphs*

15:40 – 16:05 Min Yan (Hong Kong University of Science and Technology)

*Pentagonal Subdivision*

16:05 – 16:30 Hoi Ping LUK (Hong Kong University of Science and Technology)

*Almost equilateral pentagonal tilings of the sphere*

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Coffee Break

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16:45 – 17:00 Daiki Ikegami (Yokohama National University)

*Flippable edges of triangulations on closed surfaces*

17:00 – 17:20 Yumiko Ohno (Yokohama National University)

*Facial achromatic number of triangulations on the sphere*

17:20 – 17:40 Atsuhiko Nakamoto (Yokohama National University)

*Geometric quadrangulations of a polygon*

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18:30 – 20:30 Party at AQUILA VOLANS

(Daiwa Roynet Hotel Yokohama-Koen, Naka-ku Yamashitacho 204-1, yokohama)

## DAY 3 – October 26 (Fri.)

9:05 Registration

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9:20 – 9:40 Toshiki Abe (Yokohama National University)

*Domination number of  $k$ -holed triangulation on the plane*

9:40 – 10:05 Shuji Yamada (Kyoto Sangyo University)

*Optimum grading and the Kirchhoff's matrix-tree theorem*

10:05 – 10:25 Maho Yokota (Tokyo University of Science)

*Connectivity, Toughness and Forbidden subgraph conditions*

10:25 – 10:50 Shuya Chiba (Kumamoto University)

*Partitioning a graph into cycles with a specified number of chords*

10:50 – 11:15 Mikio Kano (Ibaraki University)

*Tutte type conditions using isolated vertices for a graph to have factors*

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Coffee Break

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11:30 – 12:20 Hehui Wu (Fudan University)

*Vertex partition with average degree constraint*

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Lunch

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14:15 – 15:05 Gašper Fijavž (University of Ljubljana)

*$K_7$ -minors in embeddings*

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Coffee Break

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15:20 – 15:40 Shun-ichi Maezawa (Yokohama National University)

*Min-max theorem for an  $f$ -leaf-tree*

15:40 – 16:05 Robert D. Barish (University of Tokyo)

*Rotationally constrained simple cycles in combinatorial embeddings of graphs*

16:05 – 16:30 Yasuko Matsui (Tokai University)

*A simple enumeration algorithm for all substitutions rooted ordered subtrees into a term tree*

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Coffee Break

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16:45 – 17:05 Yoshihiro Asayama (Yokohama National University)

*Balancedness for spanning bipartite quadrangulations of triangulations*

17:05 – 17:25 Raiji Mukae (National Institute of Technology, Miyakonojo College)

*Edge-maximal projective-planar and toroidal graphs*

17:25 – 17:45 Yusuke Suzuki (Niigata University)

*Partially broken orientations of Eulerian plane graphs*