

# Combinatorial and Algebraic Aspects on Lattice Polytopes

Feb. 20 – Feb. 22, 2023  
at Kwansei Gakuin University  
(Nishinomiya Uegahara Campus)

## February 20<sup>th</sup> (Mon)

11:20~12:20 Katharina Jochemko (KTH)

“Generalized permutohedra: Minkowski linear functionals and Ehrhart positivity”

—Lunch—

13:40~14:40 Andrés R. Vindas Meléndez (UC Berkeley)

“Generalized Parking Function Polytopes”

15:00~16:00 Mariel Supina (KTH)

“Techniques in equivariant Ehrhart theory”

16:20~17:00 Max Kölbl (Osaka University)

“A counterexample of a Conjecture of Equivariant Ehrhart Theory  
in the Pseudo-Integral Case”

## February 21<sup>th</sup> (Tue)

9:30~10:10 Koji Matsushita (Osaka University)

“Toric rings of  $(0,1)$ -polytopes with small divisor class groups”

10:25~11:05 Kenta Mori (Kwansei Gakuin University)  
“Toric rings of perfectly matchable subgraph polytopes”

11:20~12:20 Rodica Dinu (University of Konstanz)  
“Gorenstein property for phylogenetic trivalent trees”

—Lunch—

13:40~14:40 Madhusdan Manjunath (Indian Institute of Technology Bombay)  
“Combinatorial Brill-Noether Theory via Lattice Points and Polytopes”

15:00~16:00 Liam Solus (KTH)  
“Some Gröbner bases for polytopes in causality”

18:00~ **Banquet at Sannomiya**

**February 22<sup>th</sup> (Wed)**

10:00~11:00 Emanuele Delucchi  
(University of Applied Arts and Science of Southern Switzerland)  
“On Polytopes associated to metric spaces”

11:20~12:20 Martha Yip (University of Kentucky)  
“Triangulations of flow polytopes and gentle algebras”

—Lunch—

13:40~14:40 Alessio D’Ali (Politecnico di Milano)  
“On a generalization of symmetric edge polytopes to regular matroids”

15:00~16:00 Robert Davis (Colgate University)  
“Perfect Matchable Set Polynomials and an Applications to Ehrhart Theory”