

# Combinatorics & Topology Seminar at GIST

8<sup>th</sup>~9<sup>th</sup> July 2024

N4 (College Building A) - Room 229

**8th (MON)**

**13:00~13:40 Sunhyuk Lim (Sungkyunkwan University)**

*Vietoris-Rips complex, hyperconvex space, and quantitative Borsuk-Ulam theorem*

**13:40~14:20 Woojin Kim (KAIST)**

*Persistence Diagrams at the Crossroads of Algebra and Combinatorics*

**14:20~15:00 Jongbaek Song (Pusan National University)**

*Polyhedral product and persistence module*

**15:00~15:30 Coffee Break**

**15:30~16:10 Jisu Kim (Seoul National University)**

*Homotopy Reconstruction via the Cech Complex and the Vietoris-Rips Complex*

**16:10~16:50 Kang-Ju Lee (Seoul National University)**

*Combinatorics and Optimization for Mapper in TDA*

**16:50~17:30 Jinha Kim (Chonnam National University)**

*Star clusters in independence complexes of hypergraphs*

**9th (TUE)**

**10:00~10:40 Minki Kim (GIST)**

*Some combinatorial properties of  $d$ -Leray complexes*

Organized by

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<https://sites.google.com/view/k-topocomb2024/talks>

