

Extensions of the colorful Helly theorem for d -collapsible and d -Leray complexes

Thursday, 29 August 2024 09:30 (1 hour)

We present extensions of the colorful Helly theorem for d -collapsible and d -Leray complexes, providing a common generalization to the topological colorful Helly theorem by Kalai and Meshulam, the very colorful Helly theorem by Arocha et al., and the semi-intersecting colorful Helly theorem by Karasev and Montejano. As an application, we obtain a strengthened version of Tverberg's theorem. This is joint work with Alan Lew.

Primary authors: KIM, Minki (GIST); LEW, Alan (Carnegie Mellon University)

Presenter: KIM, Minki (GIST)

Session Classification: Invited Talk