Discrete Analysis Seminar

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Linear graph codes

A linear graph code is a family $\mathcal{C}$ of graphs on n vertices such that the symmetric difference of the edge sets of any two graphs in $\mathcal{C}$ is also the edge set of a graph in $\mathcal{C}$. In the talk, we will investigate the maximal size of a graph code that does not contain a copy of a fixed graph H. There are graphs H that are not contained in linear codes of size $2^{\binom{n}{2}}/\exp(\sqrt{\log n})$, but we will show that for almost all graphs H with an even number of edges, there exists $\varepsilon_H > 0$ such that a linear graph code without copy of H can contain at most $2^{\binom{n}{2}}/n^{\varepsilon_H}$ graphs.

Date: 12th October, 2023

Time: 5:00pm - 6:00pm

Location: 255, Science Building

연세대학교 수학계산학부

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