

FLAG ALGEBRAS AND WEIGHTED TURÁN THEOREMS

Bernard Lidický

Iowa State University, United States

lidicky@iastate.edu

We study extensions of Turán Theorem in edge-weighted settings. A particular case of interest is when constraints on the weight of an edge come from the order of the largest clique containing it. These problems are motivated by Ramsey-Turán type problems. Using these results, we prove several new upper bounds on the Ramsey-Turán density of cliques. The talk will include an introduction to flag algebras that is one of the techniques useful for these type of problems.

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