VCU Discrete Mathematics Seminar

Flag Algebras: A Graph Theory/Computational Optimization Translator

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Wednesday, Oct. 4 1:00-1:50 4145 Harris Hall



Similar to optimization, questions in extremal graph theory ask for the maximum or minimum of a graph parameter under certain constraints. Although convex programming provides a powerful tool to solve numerical optimization questions, questions in extremal graph theory have historically been approached by ingenuity and trial-and-error. Recently, Razborov developed the theory of flag algebras, which provides a method of translating an extremal graph theory problem to a semidefinite programming problem. In this talk, we will explore the process of this translation in the context of subgraph density.

For the DM seminar schedule, see:

http://www.people.vcu.edu/~dcranston/DM-seminar