TITLE: Optimizing the Admissibility Interval of some of the Krein Parameters of Strongly Regular Graphs

ABSTRACT:

Let G be a strongly regular graph whose adjacency matrix A has three distinct eigenvalues. In this work we obtain a generalization of the Krein parameters associated to G, by considering the real Euclidean Jordan algebra spanned by the identity and the natural powers of A. This generalization led us to new feasibility conditions on the spectrum of G. Finally, we optimized the admissibility interval for some of the Krein parameters.

KEYWORDS: Graph theory, Graph eigenvalues, Matrix analysis.

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