S-SDD CLASS OF MATRICES AND ITS APPLICATIONS

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Abstract

S-SDD class of matrices has been introduced in [1] as a generalization of Ostrowski class, known in the literature also as doubly diagonally dominant matrices. As it was shown in [2], this class can be characterized by the special form of its "scaling" into an SDD matrix. Due to this fact, we can use S-SDD matrices as a tool for measuring and exploiting the magnitude of diagonal dominance. How this leads to improvement, for example, in convergence theory of relaxation methods will be the main goal of this talk.

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References

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