Nonnegative generalized inverses and least elements of polyhedral sets

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Abstract

In this talk, we present an extension of a classical result of [1] characterizing least elements of polyhedral sets in terms of nonnegative left-inverses, to nonnegativity of certain generalized inverses. We also discuss generalizations of the other results of these authors for the case of the Moore-Penrose inverse.

Keywords

Least elements, Polyhedral sets, Generalized inverse, Moore-Penrose inverse, Group inverse, Drazin inverse, Nonnegativity.

References

[1] Cottle, R.W. and A.F. Veinott (1972). Polyhedral sets having a least element. *Math. Program. 3*, 238–249.