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NOTE ON THE CORE MATRIX PARTIAL ORDERING

JACEK MIELNICZUK

Department of Applied Mathematics and Computer Science
University of Life Sciences in Lublin
Akademicka 13, 20–950 Lublin, Poland
e-mail: jacek.mielniczuk@up.lublin.pl

Abstract

Complementing the work of Baksalary and Trenkler [2], we announce some results characterizing the core matrix partial ordering.

Keywords and phrases: core inverse, core partial ordering, generalized inverse, group inverse, left star partial ordering, minus partial ordering, Moore-Penrose inverse, right sharp partial ordering.

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REFERENCES

- [1] J.K. Baksalary and S.K. Mitra, *Left-star and right-star partial orderings*, Linear Algebra Applications **149** (1991) 73–89. doi:10.1016/0024-3795(91)90326-R
- [2] O.M. Baksalary and G. Trenkler, *Core inverse of matrices*, Linear and Multilinear Algebra **58** (2010) 681–697. doi:10.1080/03081080902778222
- [3] D.S. Bernstein, *Matrix Mathematics: Theory, Facts and Formulas* (Princeton University Press, 2009).

- [4] S.K. Mitra, P. Bhimasankaram and S.B. Malik, Matrix Partial Orders, Shorted Operators and Applications (World Scientific, 2010).
doi:10.1142/9789812838452
- [5] C.R. Rao and S.K. Mitra, Generalized Inverse of Matrices and its Applications (Wiley, 1971).

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