

Core inverse of matrices

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Abstract

The notion of the Core inverse, as an alternative to the group inverse, is introduced and investigated. Several of its properties are derived with a perspective towards possible applications. The particular attention is paid to a matrix partial ordering based on the Core inverse.

Keywords

Moore–Penrose inverse, Group inverse, Bott–Duffin inverse, Generalized inverse, Normalized generalized inverse, EP matrix, Projector, Star matrix partial ordering, Minus matrix partial ordering, Sharp matrix partial ordering.