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THE REVERSE ORDER LAWS AND THE MIXED-TYPE REVERSE ORDER LAWS FOR GENERALIZED INVERSES OF MULTIPLE MATRIX PRODUCTS*

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Abstract. In this paper, necessary and sufficient conditions for a number of reverse order laws and mixed-type reverse order laws are derived by using the maximal ranks of the generalized Schur complements.

Key words. Reverse order law, Mixed-type reverse order law, Generalized inverse, Matrix product, Maximal rank, Generalized Schur complement.

AMS subject classifications. 15A03, 15A09.

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