

GENERALIZED SCHUR COMPLEMENTS OF MATRICES AND COMPOUND MATRICES*

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Abstract. In this paper, we obtain some formulas for compound matrices of generalized Schur complements of matrices. Further, we give some Löwner partial orders for compound matrices of Schur complements of positive semidefinite Hermitian matrices, and obtain some estimates for eigenvalues of Schur complements of sums of positive semidefinite Hermitian matrices.

Key words. Löwner partial order, generalized Schur complement, compound matrix, eigenvalues.

AMS subject classifications. 15A45, 15A57.

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