

ON THE CONTINUITY OF THE GROUP INVERSE

JULIO BENÍTEZ AND XIAOJI LIU

Abstract. Let $\{A_m\}_{m=1}^{\infty}$ be a sequence of complex group invertible matrices that converges to A . We characterize when A is group invertible and $\{A_m^{\#}\}_{m=1}^{\infty}$ converges to $A^{\#}$ in terms of the canonical angles between A_m and A_m^* , where $X^{\#}$ denotes the group inverse of the matrix X . We compare this characterization with some known characterizations of the continuity of the Drazin inverse.

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