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APPROXIMATION OF THE MINIMAL GERŠGORIN SET OF A SQUARE COMPLEX MATRIX*

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Abstract. In this paper, we address the problem of finding a numerical approximation to the minimal Geršgorin set, $\Gamma^{\mathcal{R}}(A)$, of an irreducible matrix A in $\mathbb{C}^{n,n}$. In particular, boundary points of $\Gamma^{\mathcal{R}}(A)$ are related to a well-known result of Olga Taussky.

Key words. eigenvalue localization, Geršgorin theorem, minimal Geršgorin set.

AMS subject classifications. 15A18, 65F15

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