

GENERATING POTENTIALLY NILPOTENT FULL SIGN PATTERNS*

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Abstract. A sign pattern is a matrix with entries in $\{+, -, 0\}$. A full sign pattern has no zero entries. The refined inertia of a matrix pattern is defined and techniques are developed for constructing potentially nilpotent full sign patterns. Such patterns are spectrally arbitrary. These techniques can also be used to construct potentially nilpotent sign patterns that are not full, as well as potentially stable sign patterns.

Key words. Potentially nilpotent, Spectrally arbitrary, Inertia, Potentially stable, Sign pattern.

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