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SPECTRAL CHARACTERIZATION OF [†]-SHAPE TREES*

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Abstract. The \dagger -shape tree is the coalescence of the star $K_{1,4}$ and the path P_{n-4} with respect to two pendent vertices. In this paper, it is showed that the \dagger -shape tree is determined by its adjacency spectrum if and only if $n \neq 2k + 9$ (k = 0, 1, ...). Furthermore, all the cospectral mates of the \dagger -shape tree are found when n = 2k + 9.

Key words. †-shape tree, Adjacency spectrum, Spectral characterization, Cospectral graphs.

AMS subject classifications. 05C50.

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