

## GRAPHS DETERMINED BY THEIR (SIGNLESS) LAPLACIAN SPECTRA\*

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**Abstract.** Let  $S(n, c) = K_1 \vee (cK_2 \cup (n - 2c - 1)K_1)$ , where  $n \geq 2c + 1$  and  $c \geq 0$ . In this paper,  $S(n, c)$  and its complement are shown to be determined by their Laplacian spectra, respectively. Moreover, we also prove that  $S(n, c)$  and its complement are determined by their signless Laplacian spectra, respectively.

**Key words.** Laplacian spectrum, Signless Laplacian spectrum, Complement graph.

**AMS subject classifications.** 05C50, 15A18, 15A36.

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