

# ON THE $\kappa$ -th LARGEST EIGENVALUE OF THE LAPLACIAN MATRIX OF A GRAPH

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**关键词** [Laplacian matrix, eigenvalue,](#)

分类号

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**Abstract** In this paper, we give the upper bound and lower bound of  $k$ -th largest eigenvalue  $\lambda_{\kappa}$  of the Laplacian matrix of a graph  $G$  in terms of the edge number of  $G$  and the number of spanning trees of  $G$ .

**Key words** [Laplacian matrix](#) [eigenvalue](#) [spanning tree](#)

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