

# Improved bounds for Estrada index of graphs

Ş. Burcu Bozkurt and Durmuş Bozkurt

*Selçuk University, Konya, Turkey*

## Abstract

Let  $G$  be a graph with  $n$  vertices and let  $\lambda_1, \lambda_2, \dots, \lambda_n$  be its eigenvalues. The Estrada index of  $G$  is defined in [3] as

$$EE = EE(G) = \sum_{i=1}^n e^{\lambda_i}.$$

In this talk, we consider the simple connected graphs with  $n \geq 4$  vertices but not complete and obtain improved bounds for Estrada index of these graphs.

## Keywords

Estrada index, Eigenvalue (of graph), Bound.

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