SOME LOWER BOUNDS FOR THE PERRON ROOT OF A NONNEGATIVE MATRIX

SHU-QIAN SHEN AND GUANG-BIN WANG

Abstract. In this paper, we present some lower bounds for the Perron root of a symmetric nonnegative matrix, which are then applied to give the lower bounds of the Perron root of a general nonnegative matrix. These bounds improve the corresponding ones in [3] and [5]. Numerical examples are supplemented to illustrate the effectiveness of the presented bounds.


Keywords and phrases: Nonnegative matrices, Perron roots, lower bounds.

REFERENCES