INEQUALITIES FOR DIAGONALLY DOMINANT MATRICES

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Abstract. Let $A = (a_{ij})$ and $H = (h_{ij})$ be positive semidefinite matrices of the same order. If $a_{ij} \geqslant |h_{ij}|$ for all i,j; A is diagonally dominant and all row sums of H are equal to zero, then we show that the sum of all $k \times k$ principal minors of A is greater than or equal to the sum of all $k \times k$ principal minors of H.

Mathematics subject classification (2020): 15A45.

Keywords and phrases: Diagonally dominant matrix, weighted Laplacian, signless Laplacian and incidence matrix, Cauchy-Binet formula.

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