SOME INEQUALITIES RELATED TO M–MATRICES

MIROSLAV FIEDLER AND VLASTIMIL PTÁK

Abstract. Several different forms of a Euler type inequality are investigated and their relation to M-matrices and doubly stochastic matrices is exhibited. The results are applied to the study of positive biquadratic forms.

REFERENCES

[1] C. BINDSCHEIDLER, *Lösung der Aufgabe 329 (J. Berkes)*, Elemente Math. **14** (1965), 132.
[2] M.-D. CHOI, *Positive semidefinite biquadratic forms*, Linear Alg. Appl. **12** (1975), 95–100.
[3] M. FIEDLER, V. PTÁK, *On matrices with non-positive off-diagonal elements and positive principal minors*, Czechoslovak Math. J. **87** (1962), 382–400.
[4] H. KOBER, *On the arithmetic and geometric mean and on Hölder's inequality*, Proc. Amer. Math. Soc. **9** (1958), 452–459.
[5] D. S. MITRINOVIĆ, *Nejednakosti*, Beograd, 1965.

ⓒ eleMENt, Zagreb
Paper MIA-01-15

Mathematical Inequalities & Applications
www.ele-math.com
mia@ele-math.com