

## ON SOME INEQUALITIES OF CHEBYSHEV TYPE

ANDRIY L. SHIDLICH AND STANISLAV O. CHAICHENKO

*Abstract.* We obtain some new inequalities of Chebyshev Type.

*Mathematics subject classification (2010):* 26D15.

*Keywords and phrases:* Inequalities, Chebyshev's inequality, monotone functions, convex function.

### REFERENCES

- [1] P. L. CHEBYSHEV, *O priblizhenijah odnih integralov cherez drugie*, Soobschenija i Protokoly Zasedanij Matematicheskogo Obschestva pri Imperatorskom Khar'kovskom Universitete, No. 2 (1882), 93–98; Polnoe Sobranie Sochinenii P. L. Chebysheva, Moskva–Leningrad, **3**, (1978), 128–131.
- [2] P. L. CHEBYSHEV, *Ob odnom rjade, dostavljajujschem predel'nye velichiny integralov pri razlozhenii podintegral'noi funkciij na mnogih etapakh*, Prilozhenie k 57 tomy Zapiskov Imp. Akad. Nauk, No. 4 (1883); Polnoe Sobranie Sochinenii P. L. Chebysheva, Moskva–Leningrad, **3**, (1978), 157–169.
- [3] H. P. HEINIG AND L. MALIGRANDA, *Chebyshev inequality in function spaces*, Real Anal. Exchange, **17**, 1 (1991/92), 211–247.
- [4] D. S. MITRINović AND J. E. PEČARIĆ, *History, variations and generalisations of the Čebyšev inequality and the question of some priorities II*, Rad JAZU (Zagreb), **450**, 9 (1990), 139–156.
- [5] D. S. MITRINović, J. E. PEČARIĆ, A. M. FINK, *Classical and new inequalities in analysis*, Kluwer, 1993.
- [6] D. S. MITRINović AND P. M. VASIĆ, *History, variations and generalisations of the Čebyšev inequality and the question of some priorities*, Univ. Beograd. Publ. Elektrotehn. Fak. Ser. Mat. Fiz. **461–497**, (1974), 1–30.
- [7] A. L. SHIDLICH, *On necessary and sufficient conditions for validity of some Chebyshev-Type inequalities*, J. Math. Inequal., **5**, 1 (2011), 71–85.
- [8] J. F. STEFFENSEN, *En Utlighed mellem Middele og edier*, Mat. Tidsskrift, **B**, (1920), 49–53.