

CLASSES OF NUMERICAL SEQUENCES

LÁSZLÓ LEINDLER

Abstract. We generalize some known classes of numerical sequences and give sufficient conditions implying the identity of the new classes. Some further embedding relations are presented.

Mathematics subject classification (2000): 26D15, 40G99.

Key words and phrases: Inequalities, embedding relations, sums, quasi β -power-monotone sequences.

REFERENCES

- [1] G. A. FOMIN, *A class of trigonometric series*, Mat. Zametki **23** (1978), 213–222.
- [2] J. W. GARRETT, C. S. REES AND C. V. STANOJEVIĆ, *L^1 -convergence of Fourier series with bounded variation*, Proc. Amer. Math. Soc. **80** (1980), 423–430.
- [3] A. N. KOLMOGOROV, *Sur l'ordre de grandeur des coefficients de la série de Fourier-Lebesgue*, Bull. Acad. Polon. Sci (A) Sci Math. (1923), 83–86.
- [4] L. LEINDLER, *On the converses of inequality of Hardy and Littlewood*, Acta Sci. Math. Szeged **58** (1993), 191–196.
- [5] ———, *On the equivalence of classes of Fourier coefficients*, Math. Ineq. & Appl. **3** (2000), 45–50.
- [6] ———, *On the equivalence of classes of numerical sequences*, Analysis Math. **26** (2000).
- [7] ———, *A note on some classes of real sequences*, Math. Ineq. & Appl., Zagreb **4** (2001).
- [8] L. LEINDLER AND J. NÉMETH, *On the connection between quasi power-monotonic and quasi geometrical sequences with application to integrability theorems for power series*, Acta Math. Hungar. **68(1-2)** (1995), 7–19.
- [9] S. M. MAZHAR, *On generalized quasi-convex sequence and its application*, Indian J. Pure and Appl. Math. **8** (1977), 784–790.
- [10] C. V. STANOJEVIĆ AND V. B. STANOJEVIĆ, *Generalizations of the Sidon-Telyakovskiĭ theorem*, Proc. Amer. Math. Soc. **110** (1987), 679–684.
- [11] S. A. TELYAKOVSKIĪ, *On a sufficient condition of Sidon for integrability of trigonometric series*, Mat. Zametki **14** (1973), 317–328.
- [12] Z. TOMOVSKI, *A note on some classes of Fourier coefficients*, Math. Ineq. & Appl., Zagreb **2** (1999), 15–18.
- [13] S. Z. A. ZENEI, *Integrability of trigonometric series*, Tamkang J. Math. **21** (1990), 295–301.