

A NOTE ON SOME CLASSES OF REAL SEQUENCES

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Abstract. It is shown that the class of real sequences defined by Ž. Tomovski recently is identical with the Fomin's class, furthermore one new class of sequences is defined and compared with some known classes of sequences.

Mathematics subject classification (2000): 26D15, 42A05.

Key words and phrases: Inequalities, cosine and sine series, embedding relations, quasi-monotone sequences.

REFERENCES

- [1] R. P. BOAS JR., *Integrability theorems for trigonometric transforms*, Springer-Verlag, *Ergebnisse* **38**, Berlin, 1967.
- [2] G. A. FOMIN, *A class of trigonometric series*, Mat. Zametki **23** (1978), 213–222.
- [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 equivalence of classes of Fourier coefficients*, Math. Ineq. & Applications **3** (2000), 45–50.
- [5] L. LEINDLER, *On the equivalence of classes of numerical sequences*, Analysis Math., (submitted).
- [6] S. SIDON, *Hinreichende Bedingungen für den Fourier-charakter einer trigonometrischen Reihe*, J. London Math. Soc. **14** (1939), 158–160.
- [7] N. SINGH AND K. M. SHARMA, *Integrability of trigonometric series*, J. Indian Math. Soc. **49** (1985), 31–38.
- [8] Č. V. STANOJEVIĆ, *Classes of L^1 -convergence of Fourier and Fourier-Stieltjes series*, Proc. Amer. Math. Soc. **82** (1981), 209–215.
- [9] Č. V. STANOJEVIĆ AND V. B. STANOJEVIĆ, *Generalizations of the Sidon-Telyakovskii theorem*, Proc. Amer. Math. Soc. **101** (1987), 679–684.
- [10] S. A. TELYAKOVSKIĭ, *On a sufficient condition of Sidon for integrability of trigonometric series*, Mat. Zametki (Russian) **14** (1973), 317–328.
- [11] Ž. TOMOVSKI, *An application of the Hausdorff-Young inequality*, Math. Ineq. & Applications **1** (1998), 527–532.
- [12] S. Z. A. ZENEI, *Integrability of trigonometric series*, Tamkang J. Math. **21** (1990), 295–301.