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On Quasi-Monotone Functions and Sequences

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Abstract. Two types of spaces of sequences as well as their analogs for functions are compared. One of them was inspired by results of A. Beurling in spectral synthesis. The other has appeared in the work of R. P. Boas in trigonometric series. It turns out that natural additional assumptions provide the equivalence of these two types of spaces. Applications are given to the study of behavior of the Fourier transform and integrability of trigonometric series.

Keywords. Fourier transform, trigonometric series, integrability.

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