

CERTAIN SEQUENCES AND THEIR EXPRESSIBILITY

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The work deals with the set $\{\sum_{n=1}^{\infty} \frac{1}{a_n c_n}\}$, where a_n is a fixed sequence of real numbers, and the c_n can be chosen as positive integers. We show some criteria for certain sequences to have an expressible set with zero Lebesgue measure.

We also deals with another set $\{\prod_{n=1}^{\infty} (1 + \frac{1}{a_n c_n})\}$, with the same assumptions. Under various assumptions, we can describe this set completely, or we can prove that it contains an interval.

This is joint work with Jaroslav Hančl, Radhakrishnan Nair.