



**BANACH AND ABSOLUTE BANACH
LIMITS OF DOUBLE SEQUENCES**

Mustafa A. Obaid

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Abstract

The idea of Banach limit for double sequences has been recently introduced in [M. Mursaleen and S. A. Mohiuddine, Banach limit and some new spaces of double sequences, Turkish J. Math. 36(1) (2012), 121-130]. In this paper, we determine the sublinear functionals to associate with the concepts of strong almost convergence and absolute almost convergence for double sequences. We characterize the space of absolute almost convergent double sequences through a new notion, that is, absolute Banach limit.

Keywords and phrases: connexions, distributions, fibré.

