

ON THE CONVERGENCE OF SOME DISCRETE PROBABILITY
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Abstract: In [4] Zakusilo proved that the random power series $\sum_{n=1}^{\infty} c^n X_n$, where $c \in (0, 1)$ and X_1, X_2, \dots are i.i.d. random variables, is convergent with probability 1 if and only if $E \log(|X_1| + 1) < \infty$. The purpose of this paper is to prove a discrete analogue of this theorem. Further, we extend the result to multiparameter random series.

2000 AMS Mathematics Subject Classification: Primary: -; Secondary: -;

Key words and phrases: -

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