ON THE TRANSFER THEOREMS FOR OBSERVED AND UNOBSERVED RANDOM VARIABLES

BY

TOMASZ K R A J K A (Lublin)

Abstract. We characterize the possible weak limits of

$$\sum_{i=1}^{n} \epsilon_i X_i / k_n$$

for a sequence $\{X_n, n \geqslant 1\}$ of independent random variables and a sequence $\{\epsilon_n, n \geqslant 1\}$ of indicator random variables ($P[\epsilon_n \in \{0,1\}] = 1$ for $n \geqslant 1$) and a non-random normalizing sequence $\{k_n, n \geqslant 1\}$ of positive reals. We consider two cases: when $\{X_n, n \geqslant 1\}$ and $\{\epsilon_n, n \geqslant 1\}$ are independent or dependent. In the first case we obtain results generalizing transfer theorems, whereas in the other case, only a partial characterization was possible.

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