**Wu, Yongfeng**; **Rosalsky, Andrew**; **Volodin, Andrei**

**Some mean convergence and complete convergence theorems for sequences of $m$-linearly negative quadrant dependent random variables.** (English) Zbl 1299.60047

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In the paper, a new type of dependence in a sequence of random variables $\{X_n : n \geq 1\}$, called $m$-linear negative quadrant dependence, is introduced. For such variables, the convergence of $n^{-1/p} \sum_{k=1}^{n} (X_k - \mathrm{E}\, X_k)$ to zero is proved in $L_p$ and in the sense of complete convergence if $1 \leq p < 2$. A Kolmogorov-type exponential inequality is also established as a by product.

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60F25 $L^p$-limit theorems



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$m$-linearly negative quadrant dependence; $L_p$-convergence; complete convergence

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**References:**

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paper as accurately as possible without claiming the completeness or perfect precision of the matching.