

Convergence in law of partial sums of linear processes in p -variation norm

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Let X_1, X_2, \dots be a sequence of short memory linear processes, S_n be the n -th partial sum process $S_n(t) = X_1 + \dots + X_{[nt]}$, $t \in [0, 1]$, and $2 < p < \infty$. We shall discuss a convergence in law of $n^{-1/2}S_n$ to a Wiener process in p -variation norm. In the case when X_1, X_2, \dots is a sequence of independent identically distributed real-valued random variables, the result is proved in [1]. This is a joint work with A. Račkauskas.

References

- [1] R. Norvaiša and A. Račkauskas, *Convergence in law of partial sum processes in p -variation norm*. Lithuanian Mathematical Journal, Vol. 48, No 2, 2008, pp. 212–227.