COMPLETE AND COMPLETE MOMENT CONVERGENCE FOR WEIGHTED SUMS OF $\tilde{\rho}$-MIXING RANDOM VARIABLES

FENGXIANG FENG, DINGCHENG WANG AND QUNYING WU

Abstract. In this paper, we establish complete convergence results and a complete moment convergence result and prove the equivalence of them for weighted sums of $\tilde{\rho}$-mixing random variables. Our results generalize and improve the results of Baum and Katz (1965) and Peligrad and Gut (1999). As an application, we obtain the Marcinkiewicz-Zygmund type strong law of large numbers for weighted sums of $\tilde{\rho}$-mixing random variables.


Keywords and phrases: Complete convergence, complete moment convergence, weighted sums, $\tilde{\rho}$-mixing random variables.

REFERENCES
