

The Strong Law of Large Numbers and the Law of the Iterated Logarithm for Product Sums of NA and AANA Random Variables*

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Abstract. By turning the product sums to the product of partial sums, this paper establishes the strong law of large numbers of Marcinkiewicz and Zygmund for product sums of AANA random variables(rvs) with different distributions, which extend and improve the corresponding results obtained by Chandra and Ghosal in 1996 ; moreover, we it prove the strong law of large numbers and the law of the iterated logarithm of Wittmann of NA rvs with different distributions, which extend the corresponding results of Wittmann obtained in 1985 and Shao and Su in 1999.

Keywords: Negatively dependent, Product sums, Strong law of large numbers, The law of the iterated logarithm

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