ASYMPTOTIC REPRESENTATION FOR THE DISTRIBUTIONS OF SUMS OF WEAKLY DEPENDENT VARIABLES

S. A. Klokov

In the present article, we study the asymptotic behavior of the distributions of sums of random variables from stationary sequences satisfying mixing conditions. We obtain a decomposition of the sums into the pairs of asymptotically independent components and deduce some well-known results in this field from the main theorems.

Key words and phrases: strictly stationary sequence, strong mixing, uniformly strong mixing, and λ -mixing conditions, attraction to the normal and stable laws.

Klokov Sergej Aleksandrovich Omsk State University, 644077 Omsk, Russia. E-mail: klokov@univer.omsk.su, klokov@math.omsu.omskreg.ru. Received April 8, 1999

Translated into English:

Siberian Advances in Mathematics, V. 10, N 4, 68–104 (2000).

© S. A. Klokov; 1999