EXPONENTIAL INEQUALITIES FOR THE DISTRIBUTIONS OF CANONICAL U- AND V-STATISTICS OF DEPENDENT OBSERVATIONS

I. S. Borisov and N. V. Volod'ko

Exponential inequalities are obtained for the distribution tails of *canonical* (degenerate) U- and V-statistics of an arbitrary order based on samples from a stationary sequence of observations satisfying φ-mixing.

Key words and phrases: stationary sequence of random variables, φ-mixing, multiple orthogonal series, canonical U- and V-statistics.

Borisov Igor' Semenovich
Volod'ko Nadezhda Vladimirovna
  Sobolev Institute of Mathematics,
  Novosibirsk, 630090 Russia.
  E-mail: sibam@math.nsc.ru
  E-mail: nvolodko@gmail.com