

**CONDITIONAL MODERATELY
LARGE DEVIATION PRINCIPLES
FOR THE TRAJECTORIES OF RANDOM WALKS
AND PROCESSES WITH INDEPENDENT
INCREMENTS**

A. A. Borovkov, A. A. Mogul'skiĭ

We extend the large deviation principles for random walks and processes with independent increments to the case of conditional probabilities given that the position of the trajectory at the last time moment is localized in a neighborhood of some point. As a corollary, we obtain a moderately large deviation principle for empirical distributions (an analog of Sanov's theorem).

Key words and phrases: moderately large deviation principle, local moderately large deviation principle, conditional moderately large deviation principle.

Borovkov Alexandr Alekseevich

Sobolev Institute of Mathematics,
Novosibirsk, 630090 Russia;
Novosibirsk State University,
Novosibirsk, 630090 Russia.
E-mail: borovkov@math.nsc.ru

Received

April 5, 2013

Mogul'skiĭ Anatolij Al'fredovich

Sobolev Institute of Mathematics,
Novosibirsk, 630090 Russia;
Novosibirsk State University,
Novosibirsk, 630090 Russia.
E-mail: mogul@math.nsc.ru

Translated into English:

Siberian Advances in Mathematics, V. 25, N 1, 39–55 (2015).
DOI: 10.3103/S1055134415010058