ASYMPTOTIC ANALYSIS OF OSCILLATING RANDOM WALKS WITH TWO LEVELS OF SWITCHING

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We obtain complete asymptotic expansions for the prestationary distribution of an oscillating random walk X_n with two levels of switching a < 0 and b > 0 in the case when the numbers |a| and b increase in proportion with \sqrt{n} as $n \to \infty$.

Key words and phrases: oscillating random walk, asymptotic expansions, controlled random process.

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