Reward Algorithms
for Semi-Markov Processes

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Abstract

New algorithms for computing power moments of hitting times and accumulated rewards of hitting type for semi-Markov processes. The algorithms are based on special techniques of sequential phase space reduction and recurrence relations connecting moments of rewards. Applications are discussed as well as possible generalizations of presented results and examples.

Key words: Semi-Markov process, Hitting time, Accumulated reward, Power moment, Phase space reduction, Recurrent algorithm.

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