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Strong laws of large numbers for sub-linear expectation without independence

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ABSTRACT

In this paper, we investigate some strong laws of large numbers for sub-linear expectation without independence which generalize the classical ones. We give some strong laws of large numbers for sub-linear expectation on some moment conditions with respect to the partial sum and some conditions similar to Petrov's. We can reduce the conclusion to a simple form when the the sequence of random variables is i.i.d. We also show a strong law of large numbers for sub-linear expectation with assumptions of quasi-surely.

KEYWORDS:

Capacity

Petrov's condition

strong law of large numbers

sub-linear expectation

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