WEIGHTED LAWS OF LARGE NUMBERS FOR A CLASS OF INDEPENDENT SUMMANDS

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Abstract. This paper obtains a necessary and sufficient condition for a weak law of large numbers for weighted averages of positive-valued independent random variables whose distributions belong to a class which includes the F^α-scheme of record theory. Additional general conditions are found under which the weak law extends to a strong law with the same norming. Examples show these conditions can be fulfilled, and that if they are not, then the weighted averages exhibit multiple growth rates.

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