

## Traditional techniques to prove some limit theorems for fuzzy random variables

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**Abstract.** In the last years, some limit theorems for fuzzy random variables have been proven by means of different techniques developed for this purpose. In this work we deal with the cadlag representation of a kind of fuzzy sets to show that these limit results can be also proved by applying well-known techniques in Probability Theory (specifically, the ones which make valid the analogous theorems for  $D[0, 1]$ -valued random elements). In this context, we will study a strong law of large numbers (whose proof will suggest a characterization of the uniform convergence) and a strong law of the iterated logarithm. Furthermore, we will check the relationships between these techniques and the ones used by Molchanov to prove a SLLN for the same random elements.