The Mean Value with Evaluation Measures and a Zero-Sum Stopping Game with Fuzzy Values

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We firstly introduce an evaluation method of fuzzy numbers called the mean value with evaluation measures. Then, using this notion, a stopping game model with fuzzy random variables could be formulated. When a sequence of fuzzy-valued random variables(fuzzy RV) are observed, the important problem is how to treat and analyze the model. Previously the observed fuzzy RV's are evaluated by probabilistic expectation and scalarization functions, that is, λ-weighting functions and fuzzy measures. Here, as an alternative approach, the mean value with evaluation measure is discussed. Also the fuzzy RV's by the stopping times are defined and we apply it to a zero-sum stopping game with fuzzy values. The saddle points for this fuzzy stopping games are given under a regularity condition.