

## **SEQUENTIAL BAYESIAN TEST FROM FUZZY EXPERIMENTAL INFORMATION**

M. Rosa Casals and Antonia Salas  
Department of Mathematics, University of Oviedo  
Oviedo, SPAIN

This paper is devoted to the sequential problem of testing hypotheses about an experiment, when its outcomes do not provide exact but rather fuzzy information.

This problem will be formalized as a special fuzzy sequential decision problem and, on assuming the Bayesian framework, we are allowed to extend the notions of risk function, stopping rule and terminal decision rule and the Bayes nonfuzzy decision procedures to the fuzzy case, and particularize them to the sequential problem of testing.

**KEYWORDS:** Zadeh's probabilistic definition, fuzzy information system, sample fuzzy information, Bayes stopping rule, Bayes terminal decision rule.