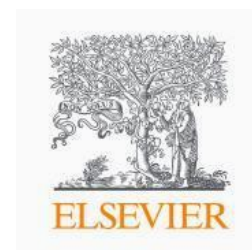




## International Journal of Approximate Reasoning

### Special Issue on Soft methods in probability and statistics



Probability and statistics were the only well-founded theories of uncertainty for a long time. However, during the last fifty years, in such areas like decision theory, artificial intelligence or information processing numerous approaches extending or orthogonal to the existing theory of probability and mathematical statistics have been successfully developed. These new approaches have appeared, either on their own like fuzzy set theory, possibility theory, rough sets, or having their origin in probability theory itself, like imprecise probability, belief functions, fuzzy random variables. The common feature of all those attempts is to allow for a more flexible modelling of imprecision, uncertainty, vagueness and ignorance. The proposed new methods are softer than the traditional theories and techniques because being less rigid they more easily adapt to the actual nature of information.

This special issue focuses on recent advances in soft methods in probability and statistics, enlarging the statistical and uncertainty modelling traditions towards a flexible and more specific handling of incomplete or subjective information.

This special issue is a follow-up of the SMPS 2016 (Soft Methods in Probability and Statistics 2016) conference held in Rome 12-14 September 2016. The submissions to the special issue must be revised and significantly extended versions of the conference papers (with, e.g., additional results, detailed proofs, applications, etc.).

The special issue is not limited to the papers presented at the SMPS 2016, but it is open to new contributions.

See <http://www.sbai.uniroma1.it/smeps2016/> for more info on the conference.

All submitted papers under this call will undergo the standard review process of the journal. All papers should be submitted to IJAR website <http://ees.elsevier.com/ija/> and choose the Special Issue "VSI: SMPS 2016". All online submissions should follow the "Guide for Authors" of the journal.

#### Important dates

- Submission of manuscripts: before December 31, 2016 (Papers will be sent to reviewers as soon as we receive them)
- Publication of the special issue: November 2017 (tentative)

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