

# COMPUTATIONAL STATISTICS AND DATA ANALYSIS

## CALL FOR PAPERS

Special Issue on

## IMPRECISION IN STATISTICAL DATA ANALYSIS

<http://www.elsevier.com/locate/csda>

We are inviting submissions for the special issue of Computational Statistics and Data Analysis that address statistical methods in combination with non stochastic imprecision.

Different sources of imprecision in connection with both empirical data or models may arise in statistical data analysis. Such an imprecision is frequently connected with linguistic data, expert opinions, perceptions as well as various kinds of ill-observed data or non-precisely defined concepts. Fuzzy sets, intervals, belief functions, random sets or imprecise probability models have been used in recent years to integrate variability and imprecision for data analysis. Applications are found in different areas, as biomedicine, finance and economics, social sciences and psychology, environmental sciences, technology, etc. to manage complex problems involving heterogeneous information. This special issue focuses on the recent advances, including methods, computation and applications, on the use of imprecision in statistics.

Key topics are:

- Statistical inference techniques for random intervals, random sets or random fuzzy sets.
- Imprecise models in data analysis.
- Dempster-Shafer theory of belief functions.
- Fusion methods, uncertainty propagation.
- Computational advances involving imprecision in the statistical methods.
- Classification and prediction using fuzzy sets.

The papers should have a computational statistics or advanced data analytic component in order to be considered for publication. Authors who are uncertain about the suitability of their papers should contact the special issue editors. All submissions must contain original unpublished work not being considered for publication elsewhere. Submissions will be refereed according to standard procedures for Computational Statistics and Data Analysis. Information about the journal can be found at <http://www.elsevier.com/locate/csda>.

The deadline for submissions is **30 January 2012**. However, papers can be submitted at any time; and, when they have been received, they will enter the editorial system immediately.

Papers for the special issue should be submitted directly to the Elsevier Electronic Submission tool EES: <http://ees.elsevier.com/csda> In EES please ensure that you select the special issue on *Imprecision in Statistical Data Analysis* and the Co-Editor responsible for the special issues.

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