



The 11<sup>th</sup> International FLINS Conference on Decision Making and Soft Computing (FLINS2014)

August 17-20, 2014, João Pessoa (Paraíba), Brazil

# FLINS 2014- Special Session on Fuzzy logic in Boolean framework

## About the conference

<http://www.de.ufpb.br/~flins2014/>

The 2014 International FLINS Conference on Decision Making and Soft Computing (FLINS 2014) provides an international forum that brings together those actively involved in areas of interest to the computational intelligence and its applications, to report on up-to-the-minute innovations and developments, to summarize the state-of-the-art, and to exchange ideas and advances in all aspects of computational intelligence.

FLINS 2014 proceedings will be again edited as a book by World Scientific and it will be again included in the ISI proceedings as previous ones.

Moreover, a number of SCI journals will devote a special issue to a strictly refereed selection of extended papers presented at FLINS 2014. Information about this will be available in the [Proceedings & Special Issues](#) page.

## Short description

As the two valued realization of the Boolean algebra is a framework for classical logic, classical theory of sets, classical relations, so is the real valued realization of the Boolean algebra a framework for the Boolean consistent Fuzzy logic in wider sense. The real-valued realization of the Boolean algebra (RVBA)[1], known as Interpolative Boolean algebra, is generalization of the famous classical two-valued Boolean algebra realization. All Boolean axioms and theorems are satisfied in the real-valued case as in the classical two-valued case (excluded middle for example as the most problematic in conventional fuzzy logics). As a consequence, all applications based on the classical finite Boolean algebra can be directly generalized by RVBA. Actually, fuzzy logic based on RVBA is the Boolean consistent fuzzy logic contrary to the conventional fuzzy logics. This is very important in the fields where conventional fuzzy logics, fuzzy sets and fuzzy relations are not adequate (theory of concepts, prototype theory, quantum logic etc.). The goal of this invited session is to bring together researchers interested in the Boolean consistent treatment of graduation (in logic, theory of sets, theory of relations and their applications).

[1] D. Radojevic, *Real-Valued Realizations of Boolean Algebras are a Natural Frame for Consistent Fuzzy logic, On Fuzziness, A Homage to Lotfi Zadeh – Volume 2, pp. 559-565.*



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### **Important Dates**

Full paper submission..... January 10, 2014  
Acceptance notification..... March 10, 2014  
Final papers submissions..... April 10, 2014

### **Paper Submission**

[http://www.de.ufpb.br/~flins2014/paper\\_submission.html](http://www.de.ufpb.br/~flins2014/paper_submission.html)

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