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Special session title: (Fuzzy) Logical algebraic structures

Abstract:

The importance of studying multi-valued logics such as Lukashevich logic, Godel logic, intuitionistic logic, quantum logic, etc., and especially fuzzy logic at this time is not hidden from anyone. But to research in the field of multi-valued logics, study the field of algebraic structures corresponding to each of the above multi-valued logics, namely MV-algebras, Heating algebra, effective algebras, BCK-algebra and BL-algebra is very necessary. These algebras and their fuzzy structures provide the basic structures and modeling required for soft computing. Soft computing is a keyword used in computer science to describe inaccurate and approximate solutions to problems that are computationally difficult to solve, and there is no known algorithm for solving them accurately in polynomials.

The purpose of this session is to bring together researchers working in the field of logical algebras and fuzzy logical algebras to discuss new results and problems, both in theory and in applications, i.e to integrate some recent theoretical and experimental contributions that reflect current results in this field.

Keywords: Soft Computing, Logical algebras, lattice, Residuated lattice, MTL-algebra, BL-algebra, MV-algebra, BCK-algebra, Equality algebra, EQ-algebra, Hoop, Boolean algebra, Effective algebra, Non-classical Logics, fuzzy algebraic structures
