

EDITORIAL

This special issue of *Mathware & Soft Computing* contains a selection of extended new versions of papers presented to the Eighth Spanish Congress on Fuzzy Logic and Technology. The congress took place in the Public University of Navarre from the 8th to the 10th of September 1998, and as in previous editions, the conference was organised in collaboration with the Spanish Association of Fuzzy Logic and Technology (FLAT) integrated, at present, in the new European Association (EUSFLAT).

The number of accepted contributions presented in the different sessions (70) and the high number of participants, confirms that the interest in Fuzzy Logic and its applications is strongly consolidated in the Spanish scientific community. The contributions presented in the congress were distributed in sessions of Theory, Modelling, Neural-Nets, Control and Applications. The quality of the works shows the high standard of the research on Fuzzy Logic in Spain.

Fuzzy Logic is an already established theory in fields like A I., Data Bases or Process Control. In these areas, it has shown to be a useful discipline and has provided brilliant applications. Its technological success has favoured an important theoretical development of some classical aspects, like connectives or Fuzzy numbers, but at the same time, new proposals are needed in order to cope with new technological challenges. The quick development of Fuzzy technology, although being beneficial for the prestige and consolidation of the Fuzzy Logic, has favoured the interest for the applications and, consequently, has produced a gap between the technical solutions and the theoretical foundations. Therefore, there is a need for debate and review of some basic topics of the theory. This Congress showed its sensibility for this unbalance by organising a special session entitled "Foundations and limits of Fuzzy Logic". In this session, traditional concepts such as "computability", "membership function", "truth" or "decision", were

discussed under a Fuzzy point of view. Also, other topics like the theoretical limits of Fuzzy logic or some ideas for real applications to intelligent systems were also presented. We think that these contributions, will show to other close disciplines that the Fuzzy community is capable of undertaking fruitful critical discussions that can help to spread the knowledge of the Fuzzy Sets theory and to improve its theoretical and technological progress.

We want to express our gratitude to the authors for their useful collaboration and the patience shown in the preparation of this volume, to Joan Jacas and to Rosa Navarro for their efficiency in producing this issue. In the same way, we must give a special mention to the work of the Spanish Association of Fuzzy Logic and Technology, and in general, to all those within our community that, showing their interest for the scientific development have contributed to the appearance of this number.

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