

## Foreword

This volume contains the papers that were presented at the Fifth Latin American Workshop on Non-Monotonic Reasoning (LANMR'09). As last year, this time we have extended our interest to include more general topics related to Computer Sciences, we use the LA part of LANMR to stand both for Languages/Logic + Algorithms, as well as for "Latin America". LANMR'09 was held in the Universidad Autónoma de Tlaxcala in Apizaco, Tlaxcala, Mexico on November 5-6, 2009.

The Fifth edition of the workshop was organized by the Benemérita Universidad Autónoma de Puebla, the Universidad de las Américas, Puebla, Universidad Autónoma Metropolitana, and the Universidad Autónoma de Tlaxcala.

The aim of the workshop was to bring together active researchers in formal areas of Computer Science (CS) such as Logic, Formal languages, Algorithms, and Non-Monotonic Reasoning. Particular topics of interest were: knowledge representation, belief revision, reasoning about actions, planning, logic programming, causality, and other related topics.

In Latin America there are several research groups interested in these areas. The number of papers and workshops submitted to different congresses related to Computer Sciences such as IBERAMIA, ENC and MICAI provides evidence of such interest. So, LANMR workshop is designed to promote cooperation among practitioners and researchers across disciplines who are interested in the formal areas of Computer Sciences. The aims of the workshop were:

- to present innovative theoretical work and original applications of the formal areas of Computer Sciences,
- to exchange ideas and to facilitate interaction between researchers of the formal areas of Computer Sciences,
- to discuss significant recent achievements in the theory and automation based on the formal areas of Computer Sciences,
- to present critical short and long term goals for the formal areas of Computer Sciences,
- to provide a forum for students to present their current research in the formal areas of Computer Sciences, and receive feedback from other students and researchers.

We would like to thank all authors who submitted papers as well as all the referees for their expertise and time they put into carefully reviewing the papers.

This year the invited speakers provided means to explore ways in which their research may contribute to the identification and addressing of problems of common interest in the formal areas of Computer Sciences. We are grateful to the invited speakers: Leopoldo Bertossi, Juan Antonio Navarro Perez, and Cesar Bautista Ramos and also to the authors of the invited paper: Luís Moniz Pereira and Alexandre Miguel Pinto, for preparing such interesting talks and for taking the time and effort to attend the workshop. We also thank the "Cuerpo Académico de Sistemas Distribuidos de la Facultad de Ciencias de la Computación" and the "Cuerpo Académico de Topología y

Sistemas Dinámicos de la Facultad de Ciencias Físico Matemáticas”, both of them from the Benemérita Universidad Autónoma de Puebla, for their support. Finally, we greatly appreciate the local committee and staff of the Facultad de Ciencias Básicas, Ingeniería y Tecnología de la Universidad Autónoma de Tlaxcala for hosting and supporting our workshop.

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