

Logic, Methodology and Philosophy of Science

Proceedings of the 14th International
Congress (Nancy)

Logic and Science Facing the
New Technologies

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Edited by

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Preface

PETER SCHROEDER-HEISTER, GERHARD HEINZMANN,
WILFRID HODGES, PIERRE EDOUARD BOUR

The 14th *International Congress of Logic, Methodology and Philosophy of Science* was held in July, 19th – 26th, 2011 in Nancy, the historic capital of Lorraine and birthplace of Henri Poincaré. We were very honored that the President of the French Republic, Monsieur Nicolas Sarkozy, generously agreed his patronage.

The LMPS congresses represent the current state of the art and offer new perspectives in its fields. There were 900 registered participants from 56 different countries. They filled 115 sessions consisting of 391 individual talks (among them 6 plenary lectures and 49 invited lectures), 22 symposia (among them 4 special invited symposia), and 13 affiliated meetings and associated events such as 6 public talks—in all nearly 600 papers. These figures reflect the fact that LMPS is not only a place for scientific communication at the highest level, but also a forum for individual and collective research projects to reach a wide international audience.

Concerning the program, there were two innovations:

- (a) For the first time in the LMPS history, the Nancy congress had a special topic: *Logic and Science Facing the New Technologies*. It illuminated issues of major significance today: their integration in society. These questions were of great importance not only to LMPS participants, but to our professional and sponsoring partners likewise. Correspondingly, a section of the congress was entirely devoted to “Methodological and Philosophical Issues in Technology”. With 16 individual lectures (three invited) and two symposia this special topic made a grand entrance.
- (b) We put much emphasis on symposia in the ‘non-invited’ part of the program. In addition to four symposia with invited speakers which we organized ourselves, and 13 affiliated symposia related to various topics of congress, for which their respective organizers were responsible, we issued a call for contributed symposia in addition to the call for contributed papers, giving researchers the chance to apply as a group

of up to 6 people for a short symposium on a selected topic. This call resulted in 18 contributed symposia, some of which were of exceptionally high quality.

The papers of this volume are a selection of invited plenary talks and invited talks given in particular sections. Even though not every invited speaker submitted a paper, most of these sections are represented in this volume. The detailed program of the congress is presented in appendix A.

A selection of contributed papers will appear in issue 18-3 (2014) and 19-1 (2015) of *Philosophia Scientiæ*. The titles of all contributed papers and symposia are listed in appendix B.

We are indebted to many persons and institutions for their integrated efforts to realize this meeting. First and foremost we would like to thank the members of our respective committees, the Local Organizing Committee, and the General Program Committee including its Senior Advisors and Advisors. They all have worked very hard during the past four years, setting up an outstanding and attractive program and staging it in a comfortable surrounding that would make the congress a scientifically and socially enjoyable event. It has been a great pleasure to work with our colleagues and staff in these committees.

We also thank the Executive Committee of the DLMPS for its constant support and encouragement. Claude Debru (Académie des Sciences, Paris) helped us, amongst many other things, with his knowledge of French institutions, for which we are very grateful. Special thanks are also due to the University Nancy 2 and its Presidents, François Le Poutier and Martial Delignon, as well as to the Deans of Nancy's Faculty of Law, Olivier Cachard and Éric Germain, who willingly let us occupy their splendid lecture halls and facilities. Without the generous financial support of the University of Lorraine, of local, national and international organizations, this meeting would not have been possible. To all these partners we express our warm gratitude.

Special thanks also go to the reviewers who helped us by friendly reading the contributions. And, last but not least we would like to thank the editor of *College Publications*, Dov M. Gabbay, for overseeing the publication of this volume, Jane Spurr, for managing the publication process, and Sandrine Avril, who worked on the L^AT_EX layout of this volume.

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