# I N F S Y S R E S E A R C H R E P O R T



#### INSTITUT FÜR INFORMATIONSSYSTEME Arbeitsbereich Wissensbasierte Systeme

# 15TH INTERNATIONAL WORKSHOP ON NON-MONOTONIC REASONING (NMR 2014) VIENNA, AUSTRIA, JULY 17-19, 2014 PROCEEDINGS

Sébastien Konieczny and Hans Tompits (eds.)

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# PROCEEDINGS OF THE 15TH INTERNATIONAL WORKSHOP ON NON-MONOTONIC REASONING (NMR 2014)

VIENNA, AUSTRIA, JULY 17-19, 2014

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#### **Preface**

This volume consists of the contributions presented at the 15th International Workshop on Non-Monotonic Reasoning (NMR 2014), which was held at the Vienna University of Technology, Austria, from July 17 to 19, 2014.

The NMR workshop series is the premier specialized forum for researchers in non-monotonic reasoning and related areas. Its aim is to bring together active researchers in the broad area of non-monotonic reasoning, including belief revision, reasoning about actions, argumentation, declarative programming, preferences, non-monotonic reasoning for ontologies, uncertainty, and other related topics.

Previous NMR workshops were held in New Paltz (New York, USA) in 1984, Grassau (Germany) in 1988, South Lake Tahoe (California, USA) in 1990, Plymouth (Vermont, USA) in 1992, Schoss Dagstuhl (Germany) in 1994, Timberline (Oregon, USA) in 1996, Trento (Italy) in 1998, Breckenridge (Colorado, USA) in 2000, Toulouse (France) in 2002, Whistler (Canada) in 2004, Lake District (UK) in 2006, Sydney (Australia) in 2008, Toronto (Canada) in 2010, and Rome (Italy) in 2012.

It is a tradition for many years that NMR is collocated with the International Conference on Principles of Knowledge Representation and Reasoning (KR) as well as with the International Workshop on Description Logics (DL)—and this year is no exception. Additionally, like for the last event in 2012, NMR and DL share an invited speaker as well as common technical sessions. A particular noteworthy fact is that all of these events are organized as part of the Vienna Summer of Logic, that also hosts FLoC 2014, the Federated Logic Conference. As that, our event is part of the probably largest gathering of logic-related events in the history of science.

We would like to thank our three invited speakers, Philippe Besnard (IRIT at Université Toulouse III Paul Sabatier), Patrick Blackburn (University of Roskilde; joint speaker with DL 2014), and Hans Rott (Universität Regensburg), as well as all the Track Chairs and Program Committee Members that helped us to organize such a great event!

For the workshop, 33 technical papers have been accepted. These technical contributions cover the full spectrum of NMR, from declarative programming, uncertainty, causality, inference, and non-monotonic logics, to description logics, belief change, and argumentation. There are also contributions dedicated to system descriptions and a special track on benchmarks for NMR.

We would like to thank all authors, reviewers, and participants for their involvement in our event, as well as all the people who helped in organizing the workshop. Particularly, we would like to thank Thomas Schmidleithner who did an exceptional job for taking care of the web-presence of NMR 2014. As well, we would also like to acknowledge the valuable asset of having the EasyChair conference management system at our disposal. Last, but not least, we thank our sponsors, KR Inc. and the Artificial Intelligence Journal, and the Kurt Gödel Society as the principal organizer of the Vienna Summer of Logic.

July 2014

Sébastien Konieczny and Hans Tompits, NMR 2014 Workshop Chairs

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**Declarative Programming Track** 

Tomi Janhunen (Aalto University)

**Argumentation and Dialog Track** 

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Commonsense and NMR for Ontologies Track

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