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**INSTITUT FÜR INFORMATIONSSYSTEME
ARBEITSBEREICH WISSENSBASIERTE SYSTEME**

**20TH WORKSHOP ON LOGIC PROGRAMMING
(WLP 2006)**

**VIENNA, FEBRUARY 22–24, 2006
PROCEEDINGS**

Michael Fink Hans Tompits Stefan Woltran (eds.)

**INFSYS RESEARCH REPORT 1843-06-02
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PROCEEDINGS OF THE 20TH WORKSHOP ON
LOGIC PROGRAMMING (WLP 2006)
VIENNA, AUSTRIA, FEBRUARY 22–24, 2006

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Preface

This volume consists of the contributions presented at the 20th Workshop on Logic Programming (WLP 2006), which was held at the Vienna University of Technology, Austria, from February 22 to 24, 2006. The series of workshops on (constraint) logic programming brings together researchers interested in logic programming, constraint programming, and related areas like databases and artificial intelligence. Previous workshops have been held in Germany, Austria and Switzerland. The workshops serve as the annual meeting of the Society of Logic Programming (GLP, Gesellschaft für Logische Programmierung e.V.) and provide a forum for exchanging ideas on declarative logic programming, nonmonotonic reasoning, and knowledge representation, facilitating interactions between research in theoretical foundations and in the design and implementation of logic-based programming systems.

Although the workshops on logic programming initially served mainly as national events, they now attract researchers from all over the world. We received a total of 27 submissions, originating not only from the EU, but also from Brazil, Canada, China, and the USA. This clearly reflects the widespread interest in the logic-programming paradigm. All submissions have been thoroughly reviewed by a distinguished program committee, and 20 papers have been selected for presentation, consisting of 18 regular papers and two system descriptions. In addition, the program included also two invited talks, given by Torsten Schaub (University of Potsdam, Germany) and Reinhard Pichler (Vienna University of Technology, Austria), as well as two tutorials, given by Armin Wolf and Ulrich Geske, both with the Fraunhofer Research Institute for Computer Architecture and Software Technology (FIRST), Berlin.

The occasion that WLP took place this year in Vienna coincided also with the centenary of Kurt Gödel's birth. Albeit the connection between Kurt Gödel, Vienna, and theoretical computer science in general is well known, as he developed his fundamental results on completeness and incompleteness in our distinguished city, what is perhaps less known is the fact that he stressed—long before the actual development of logic programming—that predicate logic should be used as a programming language. The papers in this volume bear witness of the success of this idea.

In concluding, we would like to thank all authors for their submissions and all members of the program committee, as well as all additional referees, for the time and effort spent on reviewing the papers. Furthermore, we owe a special debt to Elfriede Nedoma and Matthias Schlögel who were an indispensable help during the preparation of the workshop.

Vienna, February 2006

Michael Fink
Hans Tompits
Stefan Woltran

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