After well over two decades of research, description logics (DLs) can look back at a history of highly influential contributions, which have had a lasting impact on knowledge representation and its applications. Relevant practical milestones of this development were the standardisation of the OWL Web Ontology Language by the World Wide Web Consortium (W3C) in 2004 and its subsequent update OWL 2 in 2009, both relying on DLs for their formal semantics. Recent years have seen a number of important new trends, such as lightweight DLs and ontology-based data access. At the same time, classical topics continue to thrive and lead to new research challenges. Today, DL research considers a wide range of logical formalisms and representation languages, sometimes even crossing the border to rule or query languages, and including advanced features such as uncertainty and nonmonotonicity. Practical feasibility and utility remain a primary motive for these works, and provide the grounding that is necessary to ensure its continued practical impact.

The DL workshop is the main international event of the description logic research community. It takes place annually and aims at being an informal get-together that allows researchers to discuss the current developments in the area. The workshop explicitly welcomes submissions from researchers that are new to the area and provides quality feedback via peer-reviewing while at the same time being of an “inclusive” nature with a very high acceptance rate. There are only informal (electronic) proceedings and “publication” at the workshop is not supposed to preclude publication at conferences. Further information can be found on the DL Web pages at http://dl.kr.org/.

This volume contains the papers presented at DL 2013: The 26th International Workshop on Description Logics, held in Ulm, Germany, on July 23–26 2013. The workshop received a record number of 89 submissions, involving authors from 20 countries. Following the inclusive tradition of DL, 74 papers have been selected for presentation at the workshop, 37 of which were presented orally, while another 37 were presented as posters. In spite of the intentionally high rate of acceptance, every paper received three careful reviews, which often provided helpful feedback to the authors. We thank all program committee members and additional reviewers for their invaluable effort.

As in recent years, a Distinguished Student Paper Award was presented to the authors of a student paper, i.e., a paper that was authored independently by researchers who have not received a doctoral degree yet. In this year, the award went to the contribution

Temporal Query Answering in DL-Lite

by Stefan Borgwardt, Marcel Lippmann and Veronika Thost.

The work contributes to the field of ontology-based data access over (temporally) ordered inputs, e.g., from sensor streams, and it presents several new approaches for reasoning about query answers in this setting.
The program of DL 2013 featured invited talks by Giuseppe De Giacomo, Michel Dumontier, and Ian Pratt-Hartman, whom we would like to thank for their contribution. Abstracts of each invited talk are included in this volume. Moreover, DL 2013 for the first time has been closely colocated with the Reasoner Evaluation Workshop ORE. Also colocated, at a slightly greater distance, were the 9th ReasoningWeb Summer School and the 7th International Conference on Web Reasoning and Rule Systems (RR). We thank the organisers of these events for the good cooperation.

We also gratefully acknowledge the support of our sponsors. In particular, we thank the main conference sponsors: the Artificial Intelligence Journal, B2i Healthcare, the German Research Foundation (DFG), and the foundation for Principles of Knowledge Representation and Reasoning (KR Inc.). As usual, EasyChair has provided a convenient and efficient platform for preparing the program. Finally, thanks are due to all authors and participants of DL 2013; we hope that their stay in Ulm has been most profitable and enjoyable.

July 2013

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