

Preface

The 16th edition of the conference LWA - “Lernen, Wissen, Adaption” (in German) which translates to “Learning, Knowledge, Adaptation” brings together researchers which deal with the discovery, the management and the retrieval of knowledge. Following the tradition of previous years, LWA comprises three workshops organized by representatives of the respective special interest groups of the Gesellschaft für Informatik (GI), which is the German computer science society. These workshops address the following topics:

- KDML - Knowledge Discovery, Data Mining, and Machine Learning
- IR - Information Retrieval
- FGWM - Knowledge Management

The papers have been selected by independent program committees from the respective domains. The workshops run in parallel sessions in close vicinity to enable the exchange of ideas. They particularly meet in a joint session which includes flagship contributions of particular interest for all conference participants.

Recent trends in the corresponding research areas are highlighted by distinguished keynote speakers. In his talk on “Interdisciplinary Machine Learning”, Ulf Brefeld from TU Darmstadt points out the inherent interdisciplinarity of machine learning research as an important building block. Michael Kohlhase from Jacobs University Bremen speaks about “Mathematical Knowledge Management and Information Retrieval: Transcending the One-Brain-Barrier” and advocates for exploiting more mathematics in developing and evaluating of knowledge management concepts. Carsten Dolch from Deloitte illustrates how data analytics projects in industrial consulting contexts are conducted. In addition to these keynotes, Mirjam Minor from the Goethe University Frankfurt am Main will give a special keynote about “Case-based Reasoning in the Cloud”.

As a hand-shake of social and technical program, all authors got invited to present their work at the poster reception. A guided city tour in the historical city center of Aachen followed by the conference dinner in the university quarter complements the social program. The data management and data exploration group in the Department of Computer Science at RWTH Aachen University is proud to host the LWA 2014 conference. We hope the participants will keep the venue as an inspiring event with fruitful discussions in mind and the readers will enjoy studying the scientific contributions in this proceedings volume.

September 2014

Thomas Seidl
Marwan Hassani
Christian BEECKS
Editors, LWA’14

Organization

The LWA conference series traditionally comprises the workshops IR, KDML and FGWM which are organized by the respective special interest groups within the Gesellschaft für Informatik (German Computer Science Society). LWA 2014 is organized by the Chair of Computer Science 9 (Data Management and Data Exploration) at the Department of Computer Science, RWTH Aachen University, Germany.

KDML'14 Workshop Organization

Florian Lemmerich	University of Würzburg
Eneldo Loza Mencía	Darmstadt University of Technology

IR'14 Workshop Organization

Sascha Kriewel	University of Duisburg-Essen
Claus-Peter Klas	GESIS Leibniz Institute for the Social Sciences

FGWM'14 Workshop Organization

Michael Leyer	Frankfurt School of Finance & Management
Joachim Baumeister	denkbare GmbH

General Coordination

Institution:	Chair of Computer Science 9, RWTH Aachen University
General Chair:	Thomas Seidl
Local Coordinator:	Christina Rensinghof
Technical Program:	Christian Beecks
Social Program:	Merih Seran Uysal
Technical Assistance:	Sergej Fries, Brigitte Boden and Detlef Wetzeler
Web Setup:	Ines Färber and Anca Zimmer
Proceedings Manager:	Marwan Hassani

KDML'14 Program Committee

Martin Atzmueller	Daniel Bengs	Wouter Duivesteijn
Christian Bauckhage		

Johannes Fürnkranz
Stephan Günnemann
Andreas Hotho
Kristian Kersting
Peer Kröger

Florian Lemmerich
Eneldo Loza Mencía
Emmanuel Müller
Nico Piatkowski
Ute Schmid

Lars Schmidt-Thieme
Robin Senge
Albrecht Zimmermann

IR'14 Program Committee

David Elsweiler
Reginald Ferber
Norbert Fuhr
Joachim Griesbaum
Daniel Hienert
Andreas Henrich
Katja Hofmann

Frank Hopfgartner
Udo Kruschwitz
Johannes Leveling
Thomas Mandl
Philipp Mayr
Henning Müller
Peter Mutschke

Ralf Schenkel
Ingo Schmitt
Hans-Christian Sperker
Christian Wolff
Christa Womser-Hacker
David Zellhoefer

FGWM'14 Program Committee

Klaus-Dieter Althoff
Kerstin Bach Verdande
Axel Benjamins
Mareike Dornhöfer
Susanne Durst
Michael Fellmann

Martina Freiberg
Dimitris Karagiannis
Andrea Kohlhase
Christoph Lange
Ronald Maier
Mirjam Minor

Ulrich Reimer
Jochen Reutelshöfer
Thomas Roth-Berghofer
Bodo Rieger
Peter Rossbach