

Muhammad Saleem  
Axel-Cyrille Ngonga Ngomo  
Damien Graux  
Fabrizio Orlandi  
Emetis Niazmand  
Gabriel Ydler  
Maria-Esther Vidal  
(Eds.)

Proceedings of  
**QuWeDa 2023: 7th Workshop on  
Storing, Querying and Benchmarking Knowledge Graphs  
and**

**MEPDaW'23: 9th Workshop on  
Managing the Evolution and Preservation of the Data Web**

**co-located with 22nd International Semantic Web Conference (ISWC 2023)  
06-10 November 2023, Athens, Greece**

©2023 for the individual papers by the papers' authors, unless indicated otherwise. Copying permitted for private and academic purposes. Re-publication of material from this volume requires permission by the copyright owners, unless indicated otherwise.

Primary Editors' address:  
University of Leipzig  
Augustusplatz 10 04109 Leipzig, Germany  
saleem@informatik.uni-leipzig.de

## **QuWeDa — Storing, Querying and Benchmarking Knowledge Graphs**

The constant growth of Knowledge Graphs (KGs) on the Web raises new challenges for querying and integrating massive amounts of data across multiple KGs. Such KGs are available through various interfaces, such as data dumps, Linked Data Platform, SPARQL endpoints and Triple Pattern Fragments. In addition, various sources produce streaming data. Efficiently querying these sources is of central importance for the scalability of Linked Data and Semantic Web technologies. To exploit the massive amount of data to its full potential, users should be able to query and combine this data easily and effectively. This workshop at the [International Semantic Web Conference 2023 \(ISWC 2023\)](#) seeks original articles describing theoretical and practical methods and techniques for fostering, querying, and consuming the Data Web.

The workshop brought together members of the community interested in demonstrating their latest advances in query processing systems for Knowledge Graphs. The event fostered discussion for proposing novel RDF query processing techniques, language extension, and benchmarking and experimental evaluation of the engines.

We thank the authors for their submissions and the program committee for their hard work.

November 2023

Muhammad Saleem, Axel-Cyrille Ngonga Ngomo

### **QuWeDa 2023 Organizing Committee**

Muhammad Saleem, Universität Paderborn

Axel-Cyrille Ngonga Ngomo, Universität Paderborn

### **QuWeDa 2023 Program Committee**

Michael Röder, Paderborn University

Alexander Biggerl, University of Paderborn Data Science Group

Enrico Daga, The Open University

Carlos Buil Aranda, Universidad Técnica Federico Santa María

Stefan Schlobach, Vrije Universiteit Amsterdam

Peter Haase, metaphacts

Stasinou Konstantopoulos, NCSR Demokritos

Axel Polleres, Vienna University of Economics and Business - WU Wien

Olaf Hartig, Linköping University  
Pascal Molli, University of Nantes - LS2N  
Hala Skaf-Molli, University of Nantes - LS2N  
Paulo Ricardo Viviurka Do Carmo, HTWK Leipzig  
Aidan Hogan, DCC, Universidad de Chile  
Gong Cheng, Nanjing University  
Andre Valdestilhas, AKSW, University Leipzig  
Stefan Decker, RWTH Aachen University  
Hashim Khan, Dice, University of Paderborn

## **MEPDaW — Managing the Evolution and Preservation of the Data Web**

There is a vast and rapidly increasing quantity of scientific, corporate, governmental, and crowd-sourced data openly published on the Web. Open Data plays a catalyst role in the way structured information is exploited on a large scale. A traditional view of digitally preserving these datasets by “pickling and locking them away” for future use, like groceries, conflicts with their evolution. There are several approaches and frameworks (e.g. Linked Data Stack, PoolParty Suite, Metaphactory, etc.) targeted at managing the life-cycle of the Data Web. More specifically, these solutions are expected to tackle major issues such as the synchronisation problem (monitoring changes), the curation problem (repairing data imperfections), the appraisal problem (assessing the quality of a dataset), the citation problem (how to cite a particular version of a dataset), the archiving problem (retrieving a specific version of a dataset), and the sustainability problem (preserving at scale, ensuring long-term access).

The ninth edition of this workshop was organised for the fourth time at the International Semantic Web Conference (ISWC) and followed the structure of the previous editions. We invited a number of experts in the field of Linked Data and Data Evolution & Preservation in order to suggest and advise on the different topics that our workshop covered this year. This year, at ISWC 2023, we gathered four academic articles and a keynote by David Chaves-Fraga (University of Santiago de Compostela, Spain) for our half-day event.

We thank the authors for their submissions and the program committee for their hard work.

November 2023

Damien Graux, Fabrizio Orlandi, Emetis Niazmand  
Gabriela Ydler & Maria-Esther Vidal

### **MEPDaW 2023 Organizing Committee**

Damien Graux, Huawei Ltd., UK

Fabrizio Orlandi, ADAPT Centre, Trinity College Dublin, Ireland

Emetis Niazmand, TIB & Leibniz Universität Hannover, Germany

Gabriela Ydler, L3S Forshungszentrum, Research Center, Germany

Maria-Esther Vidal, TIB & Leibniz Universität Hannover, Germany

## **MEPDaW 2023 Program Committee**

David Chaves-Fraga, UPM, Spain

Pieter Colpaert, Ghent University, Belgium

Marcos Da Silveira, LIST, Luxembourg

Christophe Debruyne, Trinity College Dublin, Ireland

Javier D. Fernández, F. Hoffmann-La Roche AG, Switzerland

Pierre Maillot, Inria, France

Harshvardhan J. Pandit, ADAPT Centre - Trinity College Dublin, Ireland

George Papastefanatos, IMIS / RC "Athena", Greece

Iliana Petrova, Inria, France

Philipp D. Rohde, TIB, Germany

Ruben Taelman, Ghent University – imec, Belgium