

# Curriculum Vitae

## Axel Florian Polleres

March 4, 2018

**Prof. Dr. Axel Polleres** (<http://www.polleres.net/>) is a full professor working in the area of Data and Knowledge Engineering heading the Institute of Information Business of Vienna University of Economics and Business (WU Wien). Currently (Jan 2018-Jun 2018), he is also a Visiting Professor at Stanford University. He obtained his Ph.D. (Computer Science, 2003) and Habilitation (venia docendi in the subject of “Information Systems”, 2011) from Vienna University of Technology. He further worked at University Innsbruck (2003-2006), at Universidad Rey Juan Carlos, Madrid (2006-2007), and at the Digital Enterprise Research Institute (DERI) at the National University of Ireland, Galway, (2007-2011) as project leader, lecturer and leader of DERI’s Semantic Search research stream and the research unit for reasoning and querying. Between 2011 and 2013 Dr. Polleres worked in Siemens AG’s Corporate Technology Research division as senior research scientist, before joining WU Wien. His research focuses on querying and reasoning about ontologies, rules languages, logic programming, Semantic Web technologies, Web services, knowledge management, Linked Open Data, configuration technologies and their applications. He has worked in several European and national research projects in these areas, has held regular courses at different universities and has supervised students at all levels.

Dr. Polleres has published more than 100 (over 100 DBLP listed<sup>1</sup>) articles in journals (e.g. in TPLP, JAIR, Artificial Intelligence, ACM TOCL, Applied Ontology, KAIS, IJSWIS, IEEE IS, SWJ, JWS, WWWJ, JoDS, etc.), books, conference proceedings (e.g., in WWW, IJCAI, AAI, ISWC, ESWC, etc.), as workshop contributions and has co-authored a book on Semantic Web Services. His work is highly cited with an h-index of 50.<sup>2</sup> He has co-organised several international conferences and workshops in the areas of logic programming, Semantic Web, data management, Web services and related topics and acts/acted as editorial board member for JWS, SWJ and IJSWIS. He gave invited talks and tutorials at various institutions and at international conferences (including, e.g., the renowned AI Seminars at SRI in Palo Alto or Oxford University), served in programme committees of several international conferences and workshops, such as for instance WWW, IJCAI, AAI, ISWC, PODS, ESWC, AAMAS, etc. He actively contributed to international standardization efforts such as the W3C’s RDF, Rule Interchange Format (RIF), Web Ontology Language (OWL), and RDB2RDF working groups, co-chaired the W3C SPARQL working group, and currently represents WU Wien in W3C’s Advisory Committee.

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<sup>1</sup>cf. <http://www.informatik.uni-trier.de/~ley/db/indices/a-tree/p/Polleres:Axel.html>

<sup>2</sup>according to Google Scholar (<http://scholar.google.com/citations?user=R-SmVOYAAAAJ&hl=en>)

## 1 Personal Data

Degrees: Dr.techn. (PhD), Diplom-Ingenieur (MSc)  
Date and Place of Birth: 24. March 1974, Vienna, Austria  
Citizenship: Austrian  
Family Status: married to Inga, two daughters  
(Aivi Mai \*2009, Neila Franziska \*2011)  
Current Position: Full Professor  
Institute for Information Business  
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## 2 Education

**March 2011:** Habilitation in “Information Systems”. Thesis:  
“Semantic Web Technologies: From Theory to Practice”  
at Vienna University of Technology,  
external reviewers Prof. Dr. Rudi Studer,  
Prof. Dr. Steffen Staab, Prof. Dr. Claudio Gutierrez.

**October 2003:** PhD in Computer Science (with honors). Thesis:  
“Advances in Answer Set Planning”  
supervised by Prof. Dr. Thomas Eiter,  
second reviewer Prof. Dr. Georg Gottlob.

**June 2001 – September 2003:** Doktoratsstudium, Studiengang Informatik  
(PhD course in Computer Science)  
at Vienna University of Technology.

**April 2001:** MSc in Computer Science (with honors). Thesis:  
“The DLV<sup>K</sup> System for Planning with Incomplete  
Knowledge”, supervised by Prof. Dr. Thomas Eiter.

**October 1992 – April 2001:** Diploma studies in Computer Science  
at Vienna University of Technology.

**June 1992:** High School graduation (with honors).

**September 1984 – June 1992:** High School Kufstein, Tirol.

**September 1980 – June 1984:** Primary School Langkampfen, Tirol.

### 3 Awards and Honors

- **Stanford University – Distinguished Visiting Austrian Chair Professorship**, awarded by the The Freeman Spogli Institute of International Studies and its Europe Center at Stanford University and the Austrian University Rectors Conference, January 2018 – June 2018, cf. [http://tec.fsi.stanford.edu/docs/distinguished\\_visiting\\_austrian\\_chair\\_professors](http://tec.fsi.stanford.edu/docs/distinguished_visiting_austrian_chair_professors)
- **OBD-2015: Best Paper Award** for the paper “*Quality assessment & Evolution of Open Data Portals*” co-authored with S. Neumaier, and J. Umbrich. This work emerged from a master thesis that I supervised in the course of the OpenData@WU project.
- **RR2010: Best Paper Award** for the paper “*Redundancy Elimination on RDF Graphs in the Presence of Rules, Constraints, and Queries*” co-authored with R. Pichler, S. Skritek and S. Woltran. This work emerged from a collaboration between DERI and TU Vienna.
- **ISWC2009 In-Use Track: Best Paper Award** for the paper “*Produce and consume Linked Data with Drupal!*” co-authored with S. Corlosquet, R. Delbru, T. Clark, A. Polleres, and S. Decker. This work emerged from a master thesis that I supervised.
- **Juan de la Cierva 2005**, Ministerio de Educación y Ciencia, Spain. Postdoctoral research fellowship grant, hosted at the Rey Juan Carlos University, Madrid, Spain.
- **OCG-Förderpreis 2002**: Award for outstanding master theses in the field of Computer Science by the Austrian Computer Society.

Additional nominations for best paper awards: **ESWC2008** (nomination for best paper award) , **ISWC2011** (nomination for best paper award), **ISWC2016** (nomination for best student paper award), **CeDEM2017** (nominated for best paper award).

### 4 Career

#### January 2018 – June 2018

Visiting Professor at The Europe Center of the Freeman Spogli Institute at Stanford University, California, USA.

#### since January 2016

Head of Institute at the Institute for Information Business at Vienna University of Economics and Business (WU Wien).

**since September 2013**

Full Professor at the Institute for Information Business at Vienna University of Economics and Business (WU Wien).

**June 2011 – August 2013**

Senior Research Scientist at Siemens Corporate Technology Research, Siemens AG Österreich, Vienna, Austria.

**March 2010 – June 2011**

Senior Research fellow, continued leader of the “Semantic Search” research stream, as well as leader of the research unit on “Reasoning and Querying (URQ)” at the Digital Enterprise Research Institute (DERI), at the National University of Ireland, Galway.

**October 2010**

Guest researcher at the South Andean Center for Database Research (Khipu), cf. <http://www.khipu.cl/>, collaborations with Universidad de Chile (Prof. Claudio Gutierrez) and Pontificia Universidad Católica de Chile (Prof. Marcelo Arenas) during this stay. This exchange was funded by the EU’s Marie Curie programme under the project “Net<sup>2</sup>”.

**March 2009 – February 2010**

Promotion to Research Fellow and leader of the “Semantic Search” research stream, as well as leader of the research unit on “Reasoning and Querying (URQ)” at the Digital Enterprise Research Institute (DERI), at the National University of Ireland, Galway.

**April 2007 – February 2009**

Postdoctoral researcher, adjunct lecturer, and project leader at the Digital Enterprise Research Institute (DERI) Galway, led by Prof. Stefan Decker, at the National University of Ireland, Galway.

**February 2006 – May 2007**

Research fellowship at Universidad Rey Juan Carlos, Madrid, under a “Juan de la Cierva” grant by the Spanish ministry of education (MEC).

**October 2003 – April 2006**

Postdoctoral researcher and Lecturer at the Digital Enterprise Research Institute (DERI) Innsbruck, led by Prof. Dieter Fensel at the University of Innsbruck. Management of teaching activities of DERI, involvement in several European Research Projects, Advisory Committee member of the W3C, representing DERI Innsbruck.

### **July – August 2005**

Guest researcher at the Knowledge Systems Laboratory (KSL), Stanford University, led by Prof. Dr. Michael Genesereth, at University of Stanford, California, USA. Collaboration with Dr. Charles Petrie during this stay.

### **July – September 2004**

Guest researcher at the Digital Enterprise Research Institute (DERI) Galway, led by Prof. Christoph Bussler, at the National University of Ireland, Galway. Collaboration with Prof. Michael Kifer during this stay.

### **June 2001 – September 2003**

Research assistant in the project P14781-INF “A Declarative Planning System Based On Logic Programming”, supported by FWF (Austrian Science Funds), at the Institute of Information Systems, Knowledge-Based Systems Group, TU Vienna, led by Prof. Thomas Eiter.

### **January 1999 – April 2000**

Student fellow in the project P11580-MAT “Design and Implementation of a Query System for Disjunctive Deductive Databases”, supported by FWF (Austrian Science Funds), at the Institute of Information Systems, Knowledge-Based Systems Group, TU Vienna. The resulting master thesis “The  $DLV^K$  System for Planning with Incomplete Knowledge” has been awarded with the “**OCG-Förderpreis**”, a prize for outstanding master theses in the field of Computer Science by the Austrian Computer Society.

## **5 Teaching Experience**

### **University Lecture Courses**

- Database Systems, Vienna Univ. of Economics & Business (WU Wien), regularly, since winter term 2014/2015.
- Data-oriented System Analysis, Vienna Univ. of Economics & Business (WU Wien), regularly, since winter term 2013/2014.
- Semantic Web Technologies, Vienna University of Technology, winter term 2009/10, summer term 2012, summer term 2013, winter term 2014/15, summer term 2016.
- Emerging Web Media, National University of Ireland, Galway, autumn 2008 autumn 2009, autumn 2010.
- Advanced Studies in IT: Semantic Web, Lecture, National University of Ireland, Galway, spring 2008.

- Recuperación de Información, Universidad Rey Juan Carlos, summer term 2007.
- Lógica y Metodos Avanzados de Razonamiento (together with Dr. habil. David Pearce), Universidad Rey Juan Carlos, winter term 2006/2007.
- Declarative Programming (together with Nao Hirokawa), Leopold Franzens Universität Innsbruck, winter term 2005/2006.
- Introduction to Artificial Intelligence, Leopold Franzens Universität Innsbruck, summer term 2005.
- Introduction to Logic Programming, Leopold Franzens Universität Innsbruck, winter term 2004/2005.
- Telecooperation, Leopold Franzens Universität Innsbruck, summer term 2004, summer term 2005.

### **Industry Courses**

- Course on “Semantic Web KR and rule languages” at Ontotext Lab, Sirma Group Corp., February 2007, Sofia, Bulgaria.

### **University Seminars**

- Forschungsseminar Systemanalyse, Vienna Univ. of Economics & Business (WU Wien), regularly, since winter term 2013/2014.
- Web Services (together with Holger Lausen), Leopold Franzens Universität Innsbruck, winter term 2004/2005.

### **University Tutorials and Lab course**

- Praktikum Semantic Web 2 (together with Dr. Martin Hepp and Dr. Thomas Strang), Leopold Franzens Universität Innsbruck, summer term 2005.
- Praktikum Semantic Web (together with Dr. Ying Ding), Leopold Franzens Universität Innsbruck, winter term 2004/2005.
- Übung Telecooperation, Leopold Franzens Universität Innsbruck, summer term 2004.
- Praktikum Semantic Web (together with Dr. Ying Ding), Leopold Franzens Universität Innsbruck, summer term 2004.
- Übung Logics in Computer Science, Leopold Franzens Universität Innsbruck, summer term 2004.
- Übung Software Engineering I, Leopold Franzens Universität Innsbruck, winter term 2003/2004.

## Selected Supervised Bachelor and Master Theses

- Martin Beno, “Open Data Hopes and Fears, Determining the barriers of Open Data”, bachelor thesis Vienna University of Economics & Business, July 2016 (awarded with the **TALENTA Award 2016** for outstanding bachelor theses at Vienna University of Economics & Business).
- Stefan Bauer, “Evaluation of Search Engines in the Context of RIS”, master thesis, Vienna University of Economic & Business, April 2016.
- Alexander Wurl, “Formalisms and Tools to Describe and Monitor Engineering Processes”, master thesis, Technische Universität Wien, December 2015.
- Sebastian Neumaier, “*Open Data Quality: Assessment and Evolution of (Meta-)Data Quality in the Open Data Landscape*”, master thesis, Technische Universität Wien, October 2015 (awarded with the **OCG-Förderpreis 2016** for outstanding master theses in the field of Computer Science by the Austrian Computer Society).
- Christoph Martin, “*Predicting Missing Values in the Context of an Open City Data Pipeline*”, master thesis, Vienna University of Economic & Business, January 2015.
- Simon Steyskal, “*Towards an Alternative Approach for Combining Ontology Matchers*”, master thesis, Technische Universität Wien, November 2013.
- Stefan Bischof, “*Implementation and Optimisation of Queries in XSPARQL*”, master thesis, Technische Universität Wien, November 2010.
- Stéphane Corlosquet, “*Bootstrapping the Web of Data with Drupal*”, master thesis, National University of Ireland, Galway, August 2009.
- Gennaro Frazzngaro, “*Implementing and extending SPARQL with DLVHEX*”, tesi di laurea (bachelor thesis), Università della Calabria, October 2007.
- Jan Koeppen, “*Development of a Framework for Semantic Web Applications*”, proyecto fin de carrera (master thesis), Universidad Rey Juan Carlos, September 2007.
- Doris Silbernagl, “*Reasoning with Ontologies – A prototypical implementation of an ontology reasoner based on WSML*”, bachelor thesis, Leopold Franzens Universität Innsbruck, October 2005.
- Thomas Haselwanter, “*WSMX Core - A JMX Microkernel*”, bachelor thesis, Leopold Franzens Universität Innsbruck, October 2005.
- Manuela Weitlaner, “*WIKI-Engines*”, bachelor thesis, Leopold Franzens Universität Innsbruck, April 2005.
- Hannes Tammerle, “*Automated Planning - A survey of the Actual State and the IPC '04*”, bachelor thesis, Leopold Franzens Universität Innsbruck, April 2005.

- Kathrin Prantner, “*Screen Scraper Technology, Comparison, Applications*”, bachelor thesis, Leopold Franzens Universität Innsbruck, April 2005.
- Katharina Siorpaes, “*Development of Web Services including the comparison of the tools JWSDP and Axis*”, bachelor thesis, Leopold Franzens Universität Innsbruck, March 2005.
- Stefan Kirchmair “*Dynamische Webseiten und Kommunikationsmethoden*”, bachelor thesis, Leopold Franzens Universität Innsbruck, September 2004.
- Stefan Kirchmair, “*Entwicklung eines Kommunikationsportals*”, bachelor thesis, Leopold Franzens Universität Innsbruck, September 2004.
- Ejike Uzochukwu, “*Flows in Web Services*”, bachelor thesis, Leopold Franzens Universität Innsbruck, September 2004.

## PhD Supervision and Member in PhD Committees

### Supervised PhD Thesis

#### Ongoing:

- Supervisor of Sebastian Neumaier, Vienna University of Economics & Business, PhD topic “*Improving Quality in Open Data*” ongoing (since October 2015), partially funded by the FFG project “ADEQUATE”.
- Supervisor of Erwin Filtz, Vienna University of Economics & Business, PhD topic “*Efficient Processing of Graph Data*” ongoing (since October 2015), partially funded by the FFG project “GraphSense”.
- Supervisor of Simon Steyskal, Vienna University of Economics & Business, PhD topic “*Reasoning about Policies and their enforceability*” ongoing (since October 2014), partially funded by the FFG project “SHAPE”.
- Supervisor of Svitlana Vakulenko, TU Vienna, PhD topic “*Breaking News Detection*” ongoing (since October 2015).
- Supervisor of Giray Havur, Vienna University of Economics & Business, PhD topic “*Declarative Reasoning with Answer Set Programming about Business Processes*” ongoing (since October 2014), funded by the FFG project “SHAPE”.
- Supervisor of Albin Ahmeti, TU Vienna, PhD topic “*Updates in SPARQL and XSPARQL*” ongoing (since March 2012), funded by TU Vienna PhD School and the WWTF project “SEE”.

#### Completed:



- Supervisor of Stefan Bischof, TU Vienna, PhD topic “*Complementary Methods for the Enrichment of Linked Data*” PhD thesis, first year funded by the IRCSET Enterprise Partnership programme (co-funded by Alcatel-Lucent/Bell Labs Ireland in 2012), then funded by WWTF and Siemens AG Österreich, November 2017.
- Supervisor of Jürgen Umbrich, NUI Galway, “*A Hybrid Framework for Querying Linked Data Dynamically*”, PhD thesis, funded by the SFI Líon-2 project, November 2012.
- Supervisor of Nuno Lopes, NUI Galway, “*Integrating Heterogeneous Data by Extending Semantic Web Standards*”, PhD thesis, funded by SFI Líon-2 project, November 2012.
- Supervisor of Ratnesh Sahay, NUI Galway, “*An Ontological Framework for Interoperability of Health Level Seven (HL7) Applications*”, PhD thesis, NUI Galway, May 2012.
- Supervisor of Aidan Hogan, “*Exploiting RDFS and OWL for Integrating Heterogeneous, Large-Scale, Linked Data Corpora*”, PhD thesis, NUI Galway, funded by the IRCSET Embark programme, February 2011.

#### **PhD Committee memberships**

- External Reviewer/Committee Member: Fadi Maali, “*Distributed Dataflow Processing of Large RDF Graphs*”, PhD Thesis, National University of Ireland Galway (NUIG), Ireland, 2016.
- External Reviewer: Daniele Dell’Aglío, “*On Unified Stream Reasoning*”, PhD Thesis, Politecnico di Milano, 2016.
- External Reviewer : Daniel Gerber, “*Statistical Extraction of Multilingual Natural Language Patterns for RDF Predicates: Algorithms and Applications*”, PhD thesis, Universität Leipzig, February 2016.
- Committee member: of José Mora Lopez, “*Query Rewriting Optimisation Techniques for Ontology-Based Data Access*”, PhD thesis, Universidad Politécnica de Madrid (UPM), Spain, December 2015.
- External Reviewer: Yujiao Zhuo, “*PAGOdA: Pay-as-you-go Ontology Query Answering Using a Datalog Reasoner*”, PhD thesis, University of Oxford, October 2015.
- External Reviewer/Committee Member: Philipp Stutz, “*Scalable Graph Processing with Signal/Collect*”, PhD thesis, University of Zürich, Switzerland, May 2015.
- External Reviewer/Committee Member: Anna Ryabokon, “*KNOWLEDGE-BASED (RE)CONFIGURATION OF COMPLEX PRODUCTS AND SERVICES*”, PhD thesis, University of Klagenfurt, Austria, April 2015.

- External Reviewer/Committee Member: Christian Mader, “Supporting Web Vocabulary Development by automated Quality Checks”, PhD thesis, University of Vienna, July 2015.
- External Reviewer/Committee Member: Benedikt Kämpgen, “*Flexible Integration and Efficient Analysis of Multidimensional Datasets from the Web*”, PhD thesis, Karlsruhe Institute of Technology (KIT), Germany, February 2015.
- External Reviewer/Committee Member: Melisachew Wudage Chekol, “*Static Analysis of Semantic Web Queries*”, PhD thesis, Université de Grenoble, France, December 2012.
- Committee member: Ramón Hermoso, “*El concepto de confianza en sistemas organizativos: un enfoque de coordinación para agentes software*”, PhD thesis, Universidad Rey Juan Carlos, Móstoles, Spain, February 2011.
- External reviewer: Renzo Angles, “*Modelos de Base de Datos de Grafo y RDF (Graph Database Models supporting RDF)*”, PhD thesis, Universidad de Chile, Santiago, Chile, August 2009.
- Committee member: Alberto Fernandez Gil, “*Descripción, Descubrimiento y Composición de Servicios en Entornos Multiagente Abiertos. Un Enfoque Organizacional*”, PhD thesis, Universidad Rey Juan Carlos, Móstoles, Spain, November 2007.
- Committee member: Rubén Lara Hernandez, “*A Flexible Model for the Semi-Automatic Location of Services*”, PhD thesis, Universidad Autonoma de Madrid, Spain, October 2007.

### **Habilitation Committee memberships**

- External Reviewer: Axel-Cyrille Ngonga Ngomo, “Link Discovery: Algorithms and Applications”, Habilitationsschrift, Universitt Leipzig, June 2017.
- External Reviewer: Andreas Harth, “Link Traversal and Reasoning in Dynamic Linked Data Knowledge Bases”, Habilitationsschrift, Karlsruhe Institute of Technology (KIT), Germany, May 2016.
- Chair of the Habilitation comittee: Gerhard Wohlgenannt, “Automatisierte Generierung von Wissensmodellen inklusive deren betriebswirtschaftliche Aspekte und Anwendungen”, Habilitationsschrift, Vienna University of Economics & Business, 2016.

## **6 Research Interests**

- Data & Knowledge Management
- Query Languages

- Nonmonotonic Reasoning
- Logic Programming
- Planning & Configuration
- Web Technologies & Standards
- Semantic Web
- Web Services
- Linked Data

## 7 Activities in the Scientific Community

### 7.1 Project Participations and Funding Acquisition

1. “PROPEL: Propelling the potential of Enterprise Linked Data in Austria” (November 2015 – October 2016), a pilot project, funded by the Austrian Research Promotion Agency (FFG), total 214K €, funding WU: 49K €, *Role*: project partner.
2. “GraphSense:” *Role*: (September 2015 – August 2017), a research project funded by the Austrian Research Promotion Agency (FFG), coordinated by AIT, total budget: 871K €, funding WU: 111K EUR, *Role*: project partner.
3. “ADEQUATE: Analytics & Data Enrichment to improve the QUALiTY of Open Data” (October 2015 – March 2018), a research project funded by the Austrian Research Promotion Agency (FFG) , coordinated by Semantic Web Company, total budget: 521K €, funding WU: 160K EUR, *Role*: project partner.
4. “SHAPE: Safety-critical Human- & dAta-centric Process management in Engineering projects” (October 2014 – March 2017), a research project funded by the Austrian Research Promotion Agency(FFG), coordinated by WU with Siemens as industry partner, total budget: 783K €funding WU: 394K €, *Role*: coordinator.
5. Lise-Meitner postdoc stipend by the Austrian Science Fund (FWF) for Javier Fernandez Garcia (2015-2017), *Role*: mentor.
6. “SEE: SPARQL Evaluation and Extensions”, a project funded within the ICT Call 2012 of the Vienna Science and Technology Fund (WWTF – Wiener Wissenschafts-, Forschungs- und Technologiefonds), in collaboration with TU Vienna as coordinator, project start: Sept. 2012, duration 3 years (total budget 500K €); Joint proposal with Prof. Pichler, TU Vienna. *Role*: collaborator and supervisor of a PhD.
7. “Net<sup>2</sup> – A Network for Enabling Networked Knowledge”, an International Research Staff Exchange Scheme (IRSES) in EU FP7 funded under the Marie Curie programme which will fund research exchanges between international research institutions worldwide (South America, South Africa, China, Europe), 2010–2013, *Role*: coordinator.

8. Government of Ireland PhD Fellowship in Science, Engineering and Technology (IRCSET/Enterprise Partnership Program) of Stefan Bischof, 2010–2013, *Role*: coordinator/co-supervisor, co-funded by Alcatel-Lucent (the student continued under my supervision now under a PhD grant from Siemens AG Österreich since 2012).
9. Government of Ireland PhD Fellowship in Science, Engineering and Technology (IRCSET/EMBARK) of Philipp Obermeier, 2009–2012, *Role*: coordinator/co-supervisor (together with Prof. Manfred Hauswirth).
10. Government of Ireland Postdoctoral Fellowship in Science, Engineering and Technology (IRCSET/EMPOWER) of Dr. Gergely Lukácsy, 2009–2010, *Role*: coordinator/mentor.
11. SFI CSET project Lión-2 (since January 2009), *Role*: co-PI, leader of the research unit on “Reasoning and Querying (URQ)”, as well as leader of the “Semantic Search” research stream (total budget 15M €, ca. 600K € for URQ).
12. Government of Ireland PhD Fellowship in Science, Engineering and Technology (IRCSET/EMBARK) of Aidan Hogan, 2008–2011, *Role*: coordinator/supervisor.
13. COST Action IC0801, “Agreement Technologies” (since June 2008), Management Committee member, *Role*: WG leader.
14. European IST Specific Targeted Research Project (IST FP6–034718), “inContext: Interaction and Context Based Technologies for Collaborative Teams” (May 2006 – January 2009), *Role*: responsible researcher for DERI Galway.
15. Programa de Cooperación Interuniversitaria e Investigación Científica entre España y los países de Iberoamérica: Research project together with Universidad Simón Bolívar, Caracas, Venezuela, funded by the Spanish Agencia Española de Cooperación Internacional (AECI): “Mecanismos de Optimización y Evaluación para consultar eficientemente la Web Semántica en la Administración Pública Electrónica” (March 2007 – March 2008), *Role* project coordinator (funding: 15.500 €).
16. Research project funded by Universidad Rey Juan Carlos & Comunidad de Madrid (URJC-CM-2006-CET-0300): “Web Semántica para Organizaciones y Servicios (SWOS)”, January 2007– October 2008, *Role* project coordinator (funding: 20.000 €) .
17. European IST Specific Targeted Research Project (IST FP6–027324), “TripCom: Triple Space Communication” (April 2006 – March 2009), *Role*: coordination during proposal phase (Total Budget: 4.75M €, EU funding: 3.65M €), affiliate researcher until end of 2006.
18. European IST Network of Excellence (IST FP6–507482) “Knowledge Web” (January 2004 – January 2007), *Role*: senior researcher 2004–2005, non-funded member since 2006–2007.

19. “BIT (Bolzano – Innsbruck – Trento) Joint School for Information Technology” (since 2003), *Role*: coordinator Innsbruck 2004–2005.
20. FWF Forschungsprojekt (research project funded by the Austrian Science Funds) at the TU Vienna: “An Answer Set Programming Framework for Reactive Planning and Execution Monitoring (P16536-INF)” (October 2003 – October 2006), *Role*: consultancy during project proposal phase 2003.
21. FWF Forschungsprojekt (research project funded by the Austrian Science Funds) at the TU Vienna: “A Declarative Planning System Based On Logic Programming (P14781-INF)”. (2001–2003), *Role*: research assistant 2001–2003.
22. FWF Forschungsprojekt (research project funded by the Austrian Science Funds) at the TU Vienna: “Design and Implementation of a Query System for Disjunctive Deductive Databases (P11580-MAT)”. (1999-2001), *Role*: student fellow 1999–2000.

## 7.2 Selected Talks, Panels, and Tutorials

- Lecture on “Challenges for Semantic Data Integration on the Web of Open Data” at the Reasoning Web 2017 Summer School, July 2017, London, UK, see <http://reasoningweb.org/2017/>.
- Keynote speaker “Open Data as the fuel for Cognitive Computing” at the Kick-off event for the Digital Information Management Community Austria (DIMCA2017), March 2017, organized by Bundesrechenzentrum (BRZ) Austria.
- Keynote speaker, “(Enterprise) Linked Data: Whats missing?” at the International Conference on Knowledge Engineering and Semantic Web (KESW 2016), Sep 2016, Czech Republic.
- Tutor at the 12th Summer School on Ontology Engineering and the Semantic Web (SSSW’16), 17-23 July, 2015. Bertinoro, Italy.
- Keynote speaker “On Archiving Linked and Open Data” at the 2nd Workshop on Managing the Evolution and Preservation of the Data Web (MEPDaW 2016), co-located with ESWC2016, May 2016, Heraklion, Crete.
- Invited Talk: “Integrating Open Data: (How) Can Description Logics Help me?” at the CSWR Second Annual Workshop, Pontífica Universidad Católica de Chile, January 2016, Santiago, Chile.
- Invited Seminar “SPARQL1.1 Updates and Entailment - Why the specification is silent about their interaction” at the Computer Science Department of University of Oxford, December 2015, Oxford, United Kingdom.
- Invited Talk “Integrating Open Data: (How) Can Description Logics & Ontological Reasoning Help me?” at the INSIGHT Centre for Data Analytics, National University of Ireland, Galway, August 2015, Galway, Ireland.

- Tutor at the 11th Summer School on Ontology Engineering and the Semantic Web (SSSW'15), 5 - 11 July, 2015. Bertinoro, Italy.
- Invited Talk “Integrating Open Data: (How) Can Description Logics Help me?” at the 28th International Workshop on Description Logics, June 2015, Athens, Greece.
- Invited Talk “Open Data - How can you use Open Data?” at the IDC Data Hub Conference, May 2015, Vienna, Austria.
- Invited Talk “SPARQL1.1 Updates and Entailment - Why the specification is silent about their interaction” at the Karlsruhe Service Summit Workshop, February 2015, Karlsruhe, Germany.
- Invited Talk “Web Standards and Technical Challenges for Publishing and Processing Data on the Web” at the IKT Trends 2020 Series event on the topic of “Web Science” organized by the Austrian Computer Society (OCG), September 2014, Vienna, Austria.
- Lecture on “Querying the Web of Data with SPARQL and XSPARQL” at the Web Intelligence Summer School 2014, St. Etienne, France.
- Invited Talk “Web Standards and Technical Challenges for Publishing and Processing Open Data” at the IDC Data Hub Conference, June 2014, Vienna, Austria.
- Presentation “City Data Pipeline – A report about experiences from using Open Data to gather indicators of city performance ” at the European Data Forum (EDF2014), Athens, Greece.
- Invited Seminar “How (well) do Datalog, SPARQL, and RIF interplay?”, Informatik-Kolloquium, December 2013, University of Innsbruck, Austria.
- Best Practice Talk “Weaving a Web of Actions – Beschreibung und Ausführung datenorientierter Prozesse und Dienste im Web”, PzM Summit (Prozessmanagement-Kongress), November 2013, Vienna, Austria.
- Inaugural lecture (Antrittsvorlesung) “From SQL to SPARQL”, WU Wien, November 2013, Vienna, Austria.
- Half day tutorial on “RDFS & OWL Reasoning for Linked Data” at the Reasoning Web Summer School 2013, Mannheim, Germany.
- Invited Talk “OWL vs. Linked Data: Experiences and Directions”, at the 10th OWL: Experiences and Directions Workshop (OWLED 2013), May, 2013, Montpellier, France.
- Invited Tutorial “How (well) do Datalog, SPARQL, and RIF interplay?” at the second Datalog 2.0 workshop, September 2012, Vienna, Austria.

- Tutorial “Querying and Exchanging XML and RDF on the Web” at the 21st World Wide Web Conference (WWW2012)), April 2012, Lyon, France.
- “Four years into SPARQL, what’s next?”, Plenary Speaker at PAAMS’12, March 2012, Salamanca, Spain.
- Tutorial “Transforming between RDF and XML with XSPARQL” at the 2011 Semantic Technology conference (SemTech2011), San Francisco, CA.
- “SPARQL1.1: An introduction”, October 2010, invited seminar, Universidad de Chile, Santiago, Chile.
- “Semantic Web Technologies: From Theory to Standards”, October 2010, invited seminar (given in Spanish) at Univseridad de Talca, Chile.
- Invited Tutorial on “SPARQL 1.1” at RR2010, the 4th International Conference on Web Reasoning and Rule Systems (RR2010), September 2010, Bressanone/Brixen, Italy.
- Invited Tutorial on “Logics and Logic Programming in the Semantic Web” at CILC 2010, the Italian Conference on Computational Logic, July 2010, University of Calabria, Italy.
- Keynote speaker at the International Conference on Intelligent Semantic Web – Services and Applications (ISWSA 2010), June 2010, Amman, Jordan, see <http://iswsa2010.ipu.edu.jo/index.php?c=speak.htm>
- Half-Day Tutorial “Scalable OWL Reasoning for Linked Data” at the 7th European Semantic Web Conference (ESWC 2010), June 2010, Heraklion, Greece.
- Presentation on “Using Datalog for Rule-Based Reasoning over Web Data: Challenges and Next Steps” at the Datalog 2.0 workshop, Magdalen College, Oxford, UK.
- “Linked Broken Data?”, November 2009, invited seminar at Unverersity of Aberdeen, UK.
- Invited Demo “Semantic Search for CMS” at the IKS Workshop “Semantic Search - Fact and Fiction”, November, 2009, Rome, Italy.
- Invited talk “Linked Broken Data?” at the 5th International Workshop on Automated Specification and Verification of Web Systems (WWV’09), Castle of Hagenberg, July 2009, Austria.
- Panelist at the “Agreement Technologies” panel at the Sixth European Workshop on Multi-Agent Systems (EUMAS 2008), December 2008, Bath, UK, see <http://eumas08.cs.bath.ac.uk/>
- Invited Talk “That’s the Semantic Web – Using RIF and SPARQL to aggregate Linked Open Data” at Guardian Developer Network, October 2008, London, UK.

- Keynote speech “Using/Extending RIF and SPARQL to navigate Linked Open Data” at the Xinnovations PhD workshop, September 2008, Berlin, Germany, see <http://www.xinnovations.de/sti-berlin-phd-workshop.html>
- Lecture on “Rules and Ontologies for the Web” at the Reasoning Web 2008 Summer School, September 2008, Venice, Italy, see <http://reasoningweb.org/2008/>.
- Panelist at the Darklight and Digital Media Forum Symposium “Web 3.0: Where Next For The Internet?”, June 2008, Darklight Film Festival, Dublin, Ireland, see <http://www.darklight.ie/pages/talks.htm>
- “Where is the Semantic Web?”, February 2008, invited seminar at Universidad Simón Bolívar, Caracas, Venezuela.
- “An Introduction to Answer Set Programming”, February 2008, half day tutorial at Universidad Simón Bolívar, Caracas, Venezuela.
- “Next Steps on SPARQL”, January 2008, invited seminar at the University of Calabria, Cosenza, Italy.
- “Next Steps on SPARQL”, January 2008, invited seminar at the University of Bozen-Bolzano, Italy.
- Lecture on “Rule Interchange on the Web” at the Reasoning Web 2007 Summer School, September 2007, Dresden, Germany, see <http://reasoningweb.org/2007/>
- Invited Talk on “Rule Interchange on the Web” at the European Business Rules Conference (EBRC 07), June 2007, Düsseldorf, Germany, see <http://www.eurobizrules.org/>.
- “Evaluating SPARQL++ - preliminary results”, June 2007, Vienna University of Technology, Austria.
- Full-Day Tutorial “SPARQL - Where are we? Current state, theory and practice” at the 4th European Semantic Web Conference (ESWC 2007), June 2007, Innsbruck, Austria, see <http://www.polleres.net/sparqltutorial/>
- Full-Day Tutorial “Answer Set Programming for the Semantic Web” at the 3rd European Semantic Web Conference (ESWC 2006), June 2006, Budva, Montenegro, see <http://www.eswc2006.org/tutorials.html#tutorial1>
- “Ontology and rule languages for the Web”, March 2006, Universidade da Coruña, Spain.
- “Why we need another rule language for the Web?”, August 2005, SRI International, Menlo Park, CA, USA, see <http://www.ai.sri.com/seminars/>
- “Current Efforts towards Semantic Web Services (SWS): OWL-S and WSMO”, March 2005, University of Bozen-Bolzano (BIT Seminar), Italy.



- “Current Efforts towards Semantic Web Services (SWS): OWL-S and WSMO”, November 2004, Vienna University of Technology, Austria.
- “AI Planning for Web Service Composition”, September 2004, ILOG, Paris, France.
- “Planning under Uncertainty with Action Languages - A Logic Programming Approach”, February 2004, ITC-IRST Trento, Italy.

### 7.3 Conferences & Workshops Organised

- Chair of the Local Organisation Committee of the 16th International Semantic Web Conference - ISWC2017, in Vienna, Austria, see <http://iswc2017.ai.wu.ac.at/>
- Track chair of the “Semantic Web and Linked Data (Linking data)” track of the 28th ACM Conference on Hypertext and Social Media (HT2017) Prague, Czech Republic, see <https://ht.acm.org/ht2017/>
- General Chair & Local Organiser of the 11th SEMANTiCS Conference (SEMANTiCS2015), Vienna in Austria, see <http://www.semantics.cc/was-semantics-2015>
- Track chair of the “AI and the Web” track of the 29th AAAI Conference on Artificial Intelligence (AAAI-15), see <http://www.aaai.org/Conferences/AAAI/2015/aaai15aiweb.php>
- Semantic Data Management Track co-chair of the “12th ESWC (ESWC2015)”, see [2015.eswc-conferences.org/](http://2015.eswc-conferences.org/)
- General chair of the “8th International Conference on Web Reasoning and Rule Systems (RR2014)”, see <http://www.rr-conference.org/RR2014/>
- Semantic Web and Linked Open Data for E-Business Track co-chair of the “15th International Conference on Electronic Commerce and Web Technologies (EC-WEB 2014)”, see <http://www.ebusiness-unibw.org/events/ecweb2014/>
- Industry Track co-chair of the “13th International Semantic Web Conference (ISWC2014)”, see <http://iswc2014.semanticweb.org/>
- Semantic Data Management Track co-chair of the “10th ESWC (ESWC2013)”, see [2013.eswc-conferences.org/](http://2013.eswc-conferences.org/)
- Program co-chair of the “9th Extended Semantic Web Conference (ESWC2012)”, see <http://2012.eswc-conferences.org/>
- Track chair of the “Semantic Web” track at the “21st World Wide Web Conference (WWW2012)”, see <http://www.wwwconference.org/www2012/>
- Local organizer of the “5th International Conference on Web Reasoning and Rule Systems (RR2011)”, see <http://www.rr-conference.org/RR2011/>.

- Local organizer of the “7th Reasoning Web Summer School (RW2011)”, see <http://reasoningweb.org/2011/>
- Semantic Data Management Track co-chair of the “8th Extended Semantic Web Conference (ESWC2011)”, see <http://www.eswc2011.org/>
- Poster and Demonstration Track co-chair of the “9th International Semantic Web Conference (ISWC2010)”, see <http://iswc2010.semanticweb.org/>
- Metadata co-chair of the “3rd Future Internet Symposium 2010 (FIS2010)”, see <http://www.fis2010.org/>
- Program co-chair of the “3rd International Conference on Web Reasoning and Rule Systems (RR2009)”, see <http://www.rr-conference.org/RR2009/>
- Co-organizer of the workshop on “Trust and Privacy on the Social and Semantic Web - SPOT2009”, held in conjunction with the 6th Annual European Semantic Web Conference (ESWC2009), Heraklion, Greece, June 2009, see <http://spot2009.semanticweb.org/>
- Co-organizer of the the MALLOW workshop on “Coordination, Organization, Institutions and Norms in agent systems and on-line communities (COIN)” Torino, Italy, September 2009, see <http://www.cs.bath.ac.uk/coin-at-mallow-2009/>
- Co-organizer of the “3rd Workshop on Applications of Logic Programming in the (Semantic) Web and Web Services (ALPSWS2008)” held in conjunction with the 24th International Conference on Logic Programming (ICLP 2008), Udine, Italy, December 2008, see <http://www.kr.tuwien.ac.at/events/alpsws2008/>
- Co-organizer of the “Workshop on Personal Identification and Collaborations: Knowledge Mediation and Extraction (PICKME 2008)”, held in conjunction with ISWC 2008 in Karlsruhe, Germany, see <http://www.expertfinder.info/pickme2008>
- Steering Committee member of the “2nd International Workshop SMR2 2008 on Service Matchmaking and Resource Retrieval in the Semantic Web (SMR<sup>2</sup> 2008)”, held in conjunction with ISWC 2008 in Karlsruhe, Germany, see <http://www-ags.dfki.uni-sb.de/~klusch/smr2-08/index.html>
- Panel co-chair of the “2008 International RuleML Symposium on Rule Interchange and Applications (RuleML-2008)”, Orlando, Florida, October 2008, see <http://2008.ruleml.org>
- Program Co-chair of the “12th International Workshop on Cooperative Information Agents (CIA 2008)”, Czech Technical University, Prague, Czech Republic, September 2008, see <http://www-ags.dfki.uni-sb.de/~klusch/cia2008/>
- Co-organizer of the “Workshop on Service Matchmaking and Resource Retrieval in the Semantic Web (SMR<sup>2</sup>)” held in conjunction with ISWC 2007 in Busan, Korea, November 2007, see <http://www-ags.dfki.uni-sb.de/~klusch/smr2/>

- Co-organizer of the “2nd Workshop on Applications of Logic Programming in the (Semantic) Web and Web Services (ALPSWS2007)” held in conjunction with the International Conference on Logic Programming (ICLP2007), Porto, Portugal, September 2007, see <http://www.bd.cesma.usb.ve/alpsws07/>
- Sponsor Chair of the “European Semantic Web Conferences 2007 (ESWC’07)”, Innsbruck, Austria, June 2007, see <http://www.eswc2007.org>
- Organizer of the project workshop “Query Optimization for the Semantic Web”, at Universidad Rey Juan Carlos, Madrid, Spain, May 2007; supported by the Spanish AECI under the project ”Mecanismos de Optimización y Evaluación para consultar eficientemente la Web Semántica en la Administración Pública Electrónica”, see <http://www.poller.es.net/SWQueryOptWS>
- Co-organizer of the workshop on “Correspondence and Equivalence for Nonmonotonic Theories (CENT2007)” held in conjunction with the Ninth International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2007), Tempe, AZ, May 2007, see <http://www.kr.tuwien.ac.at/cent2007/>
- Main organizer of the “1st ExpertFinder Workshop” co-located with the KnowledgeWeb General Assembly, Berlin, Germany, January 2007, see <http://lstdis.cs.uga.edu/~aleman/efw2007/>
- Main organizer of the “Workshop on Applications of Logic Programming in the Semantic Web and Semantic Web Services (ALPSWS2006)” held in conjunction with the Federated Logic Conference (FLOC2006), Seattle, Washington, USA, August, 2006, see <http://events.deri.at/alpsws2006/>
- Co-organizer of the “First International Workshop on Mediation in Semantic Web Services (MEDIATE 2005)” held in conjunction with the 3rd International Conference on Service Oriented Computing (ICSOC 2005), Amsterdam, The Netherlands, December 2005, see <http://events.deri.at/mediate2005/>
- Local organizer of the “W3C Workshop on Frameworks for Semantics in Web Services”, Innsbruck, Austria, June 2005, see <http://www.w3.org/2005/01/ws-swsf-cfp.html>

## 7.4 Referee Activities

### Journals and Magazines Editorial Board Memberships and Guest Editorship

- Area Editor for the *Journal of Web Semantics (JWS)*, published by Elsevier, since January 2015.
- Editorial Board member of *Semantic Web Journal (SWJ)*, published by IOS Press, since January 2010.

- Editorial Board member of *International Journal On Semantic Web and Information Systems (IJSWIS)*, published by IGI Global, October 2012 – January 2016.
- Guest editor of a Special Issue (Volume 7, Issue 3) on “The Web of Data” for the *Journal of Web Semantics (JWS)*, September 2009.
- Area editor for “Database & Semantic Web” of the *ALP Newsletter*, the electronic newsletter of the Association for Logic Programming, since 2006–2013.

### **Referee for Journals and Books**

- ACM Transactions on Database Systems (TODS)
- Handbook of Research on Emerging Rule-Based Languages and Technologies: Open Solutions and Approaches
- Knowledge and Information Systems (KAIS)
- AI Communications, The European Journal on Artificial Intelligence (AICom)
- Information Processing & Management (IP&M)
- Journal of Artificial Intelligence Research (JAIR)
- Computational Intelligence Journal (CI)
- Referee for the Data and Knowledge Engineering Journal (DKE)
- International Journal of Cooperative Information Systems (IJCIS)
- IEEE Transactions of Data and Knowledge Engineering (TKDE)
- World Wide Web Journal (WWWJ)
- Journal of Web Services Research (JWSR)
- Journal of Web Semantics (JWS)
- International Journal of Electronic Commerce (IJECE)
- Theory and Practice of Logic Programming (TPLP)
- Journal of Data Semantics (JoDS)
- IEEE Intelligent Systems (IEEE IS)
- Transactions on Advanced Research (IPSI BgD Journals)

## Program Committee Memberships for Workshops and Conferences

- 29th ACM Conference on Hypertext and Social Media (HT2018), see <https://ht.acm.org/ht2018/>
- IJCAI-ECAI 2018, the 27th International Joint Conference on Artificial Intelligence and the 23rd European Conference on Artificial Intelligence, see <http://www.ijcai-18.org/>
- ACM Web Science Conference (WebSci '17), see <http://www.websci17.org/>
- 1st Conference on Language, Data and Knowledge (LDK), see <http://ldk2017.org/>
- 26th International World Wide Web Conference (WWW2017), see <http://www2017.com.au>)
- 15th International Semantic Web Conference (ISWC 2016), see <http://iswc2016.semanticweb.org/>, senior program committee member research track
- 20th International Conference on Knowledge Engineering and Knowledge Management (EKAW 2016)
- WebSci16 (Web Science 2016), see <http://www.websci16.org/>
- 15th International Conference on Principles of Knowledge Representation and Reasoning (KR2016), see <http://www.kr.org/KR2016/>
- AMW 2016 – Alberto Mendelzon International Workshop on Foundations of Data Management , see <http://www.amw-rdm.org/>
- 25th International World Wide Web Conference (WWW2016), see <http://www2016.ca/>
- 24th International Joint Conference on Artificial Intelligence (IJCAI-15), senior program committee member, see <http://ijcai15.org/>
- 14th International Semantic Web Conference (ISWC 2015), see <http://iswc2015.semanticweb.org/>, senior program committee member research track
- 24th International World Wide Web Conference (WWW2015), see <http://www2015.it/>
- OrdRing 2014 - 2nd International Workshop on Ordering and Reasoning, see <http://www.streamreasoning.org/events/ordring2014>
- 2014 IEEE/WIC/ACM International Conference on Web Intelligence (WI 2014), see <http://wic2014.mimuw.edu.pl/>
- 21st European Conference on Artificial Intelligence (ECAI 2014), senior program committee member, see <http://www.ecai2014.org/>

- ESWC2014, see <http://2014.eswc-conferences.org/>
- 28th AAAI Conference on Artificial Intelligence (AAAI-14), see <http://www.aaai.org/Conferences/AAAI/aaai14.php>
- 12th International Semantic Web Conference (ISWC 2013), see <http://iswc2013.semanticweb.org/>, senior program committee member research track, program committee member evaluation track, in-use track
- 4th International Workshop on Consuming Linked Data (COLD 2013), see <http://db.uwaterloo.ca/cold2013/>
- OrdRing 2013 - 2nd International Workshop on Ordering and Reasoning, see <http://www.streamreasoning.org/events/ordring2013>
- Workshop on Society, Privacy and the Semantic Web - Policy and Technology (PrivOn 2013 - PrivOn 2017), see <http://privon.semanticweb.org/>
- 23rd International Joint Conference on Artificial Intelligence (IJCAI-13), see <http://ijcai13.org/>
- iThings 2013 Conference (the 2013 IEEE International Conference on Internet of Things), see <http://www.china-iot.net/iThings2013.htm>, technical programme committee member for the “Intelligent Management” track
- 27th AAAI Conference on Artificial Intelligence (AAAI-13), see <https://www.aaai.org/Conferences/AAAI/aaai13.php>, senior program committee member in the “AI and the Web” track
- 12th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2013), see <http://lpnmr2013.udc.es/>
- Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP) 2013, see <http://sites.google.com/site/aspocp13>
- 7th International Conference on Web Reasoning and Rule Systems (RR2013), see <http://www.rr-conference.org/RR2013/>
- ESWC2013, senior PC member of Research track, see <http://2013.eswc-conferences.org/>
- ESWC2013 workshop on Services and Applications over Linked APIs and Data (SALAD2013), see <http://salad2013.linkedservices.org/>
- Second international workshop on Knowledge Discovery and Data Mining Meets Linked Open Data (Know@LOD), see <http://www.ke.tu-darmstadt.de/know-a-lod-2013/>
- 32th ACM SIGMOD-SIGACT-SIGART Symposium on Principles of Database Systems (PODS 2013), see <http://www.sigmod.org/2013/> – External Review Committee (ERC)

- 11th International Semantic Web Conference (ISWC 2012), see <http://iswc2012.semanticweb.org/>, senior program committee member
- ISWC2012 Workshop on Consuming Linked Data (COLD 2012), see <http://km.aifb.kit.edu/ws/cold2012/>
- International Conference on Semantic Systems 2012, Graz, Austria (I-SEMANTICS'12), see <http://i-semanticstugraz.at/>
- 20th European Conference on Artificial Intelligence (ECAI 2012), see <http://www2.lirmm.fr/ecai2012/>
- ECAI2012 workshop on Standards for Smart Applications (S4SA 2012), see <https://sites.google.com/site/s4sa2012/>
- 26th AAAI Conference on Artificial Intelligence (AAAI-12), see <http://www.aaai.org/Conferences/AAAI/aaai12.php>
- 3rd International Workshop on Data Engineering Meets the Semantic Web (DESWEB), see <http://sites.google.com/site/desweb2012/>
- ISWC2011 Workshop on Consuming Linked Data (COLD 2011), see <http://km.aifb.kit.edu/ws/cold2011/>
- 10th International Semantic Web Conference (ISWC 2011), see <http://iswc2011.semanticweb.org/>, senior program committee member
- 10th International Semantic Web Conference In-Use Track (ISWC 2011), see <http://iswc2011.semanticweb.org/>
- 1st International Workshop on Ordering and Reasoning (OrdRing 2011), see <http://ordring2011.search-computing.org/>
- 25th Workshop for Logic Programming (WLP 2011), see <http://www.kr.tuwien.ac.at/events/wlp11/>
- 19th International Conference on Applications of Declarative Programming and Knowledge Management <http://www.kr.tuwien.ac.at/events/inap11/>
- Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP) 2011 <http://www.dbai.tuwien.ac.at/proj/aspocp11/>
- The 2011 IEEE/WIC/ACM International Conference on Web Intelligence, see <http://wi-iat-2011.org/>
- 10th International Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE 2011), see <http://www.otm-conferences.org/index.php/odbasehornav>
- International Conference on Semantic Systems 2011, Graz, Austria (I-SEMANTICS'11), see <http://i-semanticstugraz.at/>

- Linked Data Triplification Challenge @I-SEMANTICS'11, see <http://i-semanticstugraz.at/triplification-challenge>
- 21st International Conference on Automated Planning and Scheduling (ICAPS 2011), see <http://icaps11.icaps-conference.org/>
- 22nd International Joint Conference on Artificial Intelligence (IJCAI-11), see <http://ijcai-11.iiia.csic.es/>.
- Extended Semantic Web Conference (ESWC 2011) Reasoning Track, see <http://www.eswc2011.org/>
- 1st Workshop on High-Performance Computing for the Semantic Web (HPCSW2011), see <http://www.cs.rpi.edu/~weavej3/hpcsw2011/index.xhtml>
- Semantic Search workshop at WWW2011 (SEMSEARCH'11), see <http://km.aifb.uni-karlsruhe.de/ws/semsearch11>
- Fourth International Workshop on Logic in Databases (LID 2011), co-located with EDBT & ICDT 2011, see <http://lid2011.lille.inria.fr/>.
- 11th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR 2011), see <http://sites.google.com/site/lpnmr2011/>
- Fourth International Workshop on Service Matchmaking and Resource Retrieval in the Semantic Web (SMR2 2010), see <http://www-ags.dfki.uni-sb.de/~klusck/smr2-10/>
- Workshop on Aided Formalization of Business Rules and Policies – FoBuR2010, see <http://www.ontorule-project.eu/dissemination/events/fobur2010>
- ISWC2010 Workshop on Consuming Linked Data (COLD), see <http://consuminglinkeddata.org/COLD2010>
- International Conference on Semantic Systems 2010, Graz, Austria (I-SEMANTICS'10), see <http://i-semanticstugraz.at/>
- Extended Semantic Web Conference (ESWC 2010) Ontologies and Reasoning Track, see <http://www.eswc2010.org/calls/ontologies-and-reasoning>
- 25-esimo Convegno Italiano di Logica Computazionale (CILC 2010) – Italian Conference on Computational Logic, see <http://www.mat.unical.it/CILC2010/>
- Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP) 2010 <http://www.dbai.tuwien.ac.at/proj/aspocp10/>
- 12th European Conference on Logics in Artificial Intelligence (JELIA 2010), see <http://jelia2010.tkk.fi/>



- 24th AAAI Conference on Artificial Intelligence (AAAI-10), see <http://www.aaai.org/Conferences/AAAI/aaai10.php>
- 3rd International Workshop on Ontology Alignment and Visualization (OnAV'10), see <http://www.ifs.tuwien.ac.at/~mlanzenberger/OnAV10/>
- 9th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2010), see <http://www.cse.yorku.ca/AAMAS2010/>
- AAAI Spring Symposium on "Linked AI:"Linked Data Meets Artificial Intelligence", March 22-24, 2010, see <http://www.foaf-project.org/events/linkedai>
- WWW2010 workshop: Linked Data on the Web (LDOW2010), see <http://events.linkeddata.org/ldow2010/>
- WWW2010 workshop: Semantic Search (SemSearch10), see <http://km.aifb.uni-karlsruhe.de/ws/semsearch10/>
- 19th International World Wide Web Conference (WWW2010), see <http://www2010.org/>
- 8th International Semantic Web Conference (ISWC 2009), see <http://iswc2009.semanticweb.org/>
- ISWC 2009 Workshop on Semantics for the Rest of Us – Variants of Semantic Web Languages in the Real World, see <http://dig.csail.mit.edu/2009/SemRUs-ISWC09/>
- First International Workshop on Logic-Based Interpretation of Context: Modelling and Applications (Log-IC 2009), see <http://www.cs.uni-potsdam.de/lpnmr09/index.php?page=workshops>
- 8th International Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE 2009), see <http://www.onthemove-conferences.org>
- 21st International Joint Conference on Artificial Intelligence (IJCAI-09), see <http://ijcai-09.org/>
- 6th European Semantic Web Conference (ESWC 2009), see <http://www.eswc2009.org/>
- 18th International World Wide Web Conference (WWW2009), see <http://www2009.org/>
- 2nd International Workshop on Ontology Alignment and Visualization (OnAV'09), see <http://www.ifs.tuwien.ac.at/~mlanzenberger/OnAV09/>
- Workshop on Data Integration through Semantic Technology (DIST2008), see <http://events.sti2.at/dist2008/>

- First International Workshop on Fuzzy Logic On the Web (FLOW 2008), see <http://www.cwi.ugent.be/flow2008/>
- ISWC2008 Workshop on Nature inspired Reasoning for the Semantic Web (NatuReS), see <http://natures.few.vu.nl/>
- Workshop on Agreement Technologies (WAT 2008), see <http://wat2008.gti-ia.dsic.upv.es/>
- 10th International Conference on Electronic Commerce (ICEC 2008), see <http://www.icec08.org/>
- 3rd Asian Semantic Web Conference (ASWC 2008), see <http://www.aswc2008.org/>
- 13th International Conference on Artificial Intelligence: Methodology, Systems, Applications (AIMSA 2008), see <http://www.aimsaconference.org/>.
- 3rd International Workshop on Applications of Semantic Technologies (AST 2008), see <http://km.aifb.uni-karlsruhe.de/ws/ast2008>
- 7th International Semantic Web Conference (ISWC 2008), see <http://iswc2008.semanticweb.org/>
- RuleML Symposium on Rule Interchange and Applications (RuleML-2008), see <http://2008.ruleml.org/>
- 6th International Workshop on Evaluation of Ontology-based tools and the Semantic Web Service Challenge (EON & SWS-Challenge 2008), see <http://sws-challenge.org/wiki/index.php/EON-SWSC2008>
- 2nd International Conference on Web Reasoning and Rule Systems (RR2008), see <http://www.rr-conference.org/RR2008/>
- International Workshop on the Role of Services, Ontologies, and Context in Mobile Environments (RoSOC-M), see <http://events.deri.at/RoSOC-M/>
- 5th European Semantic Web Conference (ESWC 2008), see <http://www.eswc2008.org/>
- Demonstrations track of the 5th European Semantic Web Conference (ESWC 2008), see <http://www.eswc2008.org/calldemos.html>
- PhD Symposium of the 5th European Semantic Web Conference (ESWC 2008), see <http://www.eswc2008.org/callphd.html>
- Tenth International Symposium on Practical Aspects of Declarative Languages (PADL 08), see <http://www.ist.unomaha.edu/padl2008/>
- Reasoning Web Summer School 2008, see [www.reasoningweb.org/2008/](http://www.reasoningweb.org/2008/)

- International Workshop on Ontology Alignment and Visualization (OnAV'08), see <http://www.ifs.tuwien.ac.at/~mlanzenberger/OnAV08/>
- International Workshop on Service Composition & SWS Challenge (SerComp & SWS Challenge '07), see <http://events.deri.at/sercomp2007/>
- ACM Sixteenth Conference on Information and Knowledge Management (CIKM 2007), see <http://www.fc.ul.pt/cikm2007/>
- RuleML Symposium on Rule Interchange and Applications (RuleML-2007), see <http://2007.ruleml.org/>
- Joint ODBIS & SWDB workshop on Semantic Web, Ontologies, Databases (SWDB-ODBIS07), see <http://lstdis.cs.uga.edu/swdb-odbis07/>
- 1st First International Workshop: "New forms of reasoning for the Semantic Web: scaleable, tolerant and dynamic", see <http://members.deri.at/~ruzicap/ISWC2007-WS/>
- 2nd International ExpertFinder Workshop: FEWS2007 (Finding Experts on the Web with Semantics), see <http://fews.semanticweb.org/>
- 6th International Semantic Web Conference and the 2nd Asian Semantic Web Conference (ISWC 2007+ASWC2007), see <http://iswc2007.semanticweb.org/>
- 5th International Conference on Service-Oriented Computing (ICSOC 2007), see <http://icsoc07.icsoc.org/>
- 1st European Workshop on the Use of Ontologies in Logistics Applications" (OntoLogistics2007), see <http://events.deri.at/ontologistics2007/>
- Conference on Social Semantic Web (CSSW 2007), see <http://aksw.org/cssw>
- 4th International Workshop on Semantic Web for Services and Processes (SWSP 07), see <http://dme.uma.pt/jcardoso/Research/Conferences/SWSP07/>
- 2nd International Workshop on Applications of Semantic Technologies (AST 2007), see <http://km.aifb.uni-karlsruhe.de/ws/ast2007>
- 1st International Conference on Web Reasoning and Rule Systems (RR2007), see <http://www.rr-conference.org/RR2007/>
- 6th International Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE'07), see <http://www.cs.rmit.edu.au/fedconf/index.html?page=odbase2007cfp>
- 2nd International Workshop on Managing Context Information and Semantics in Mobile Environments (MCISME 2007), see <http://mcisme2007.deri.ie/>
- 2nd International Conference on e-Business (ICE-B 2007), see <http://www.ice-b.org/ICE-B2007/>

- 4th European Semantic Web Conference (ESWC 2007), see <http://www.eswc2007.org/>
- Knowledge Web PhD Symposium 2007 (KWEPSY 2007), see <http://ontoworld.org/wiki/KWEPSY2007>
- 1st International Workshop on Applications of Semantic Technologies (AST 2006), see <http://km.aifb.uni-karlsruhe.de/ws/ast2006>
- 4th International Conference on Service-Oriented Computing (ICSOC 2006)), see <http://icsoc06.icsoc.org/>
- Service Discovery on the WWW Workshop (SDISCO'06)
- 1st International Workshop on Semantic Matchmaking and Resource Retrieval: Issues and Perspectives (SMR 2006)
- 5th European Networked Knowledge Organization Systems (NKOS 2006) Workshop
- 2006 International Conference on E-business (ICE-B 2006), see <http://www.ice-b.org/ICE-B2006/>
- International Conference on Rules and Rule Markup Languages for the Semantic Web (RuleML 2006)
- Reasoning on the Web (RoW 2006)
- International Conference on Internet and Web Applications and Services (ICIW 2006)
- Workshop for Logic Programming (WLP 2006)
- Canadian Semantic Web Working Symposium 2006
- Semantic-Based Resource Discovery, Retrieval and Composition (RDRC) Track of the 21st Annual ACM Symposium on Applied Computing (SAC'06)
- 3rd International Conference on Service-Oriented Computing (ICSOC 2005), see <http://icsoc05.icsoc.org/>
- PRODIS 2005: Workshop on Product-related Data in Information Systems, see <http://events.deri.at/prodis2005/>
- 1st International Workshop on Web Service Choreography and Orchestration for Business Process Management (BPM 2005), see <http://events.deri.at/bpm2005/>
- IADIS International Conference on WWW/Internet 2005, see <http://www.iadis.org/icwi2005/>
- 4th International Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE 2005), see <http://www.cs.rmit.edu.au/fedconf/odbase/2005/>
- SIGIR 2004 Semantic Web Workshop, see <http://events.deri.at/sw2004/>

## 7.5 Other Memberships in Organisations, Working Groups, and Committees

- Member of the W3C Advisory Committee, representing WU (Wirtschaftsuniversität Wien) - Vienna University of Economics and Business, since January 2014, <http://www.w3.org>.
- Member of the ESWC Scientific Steering Committee, June 2012 – June 2016, <http://www.eswc-conferences.org/>
- Member of the RR Conference Steering Committee, since May 2011, <http://rr-conference.org/>
- Co-chair of the W3C SPARQL Working Group, since February 2009, <http://www.w3.org/2001/sw/DataAccess/>.
- Member of the W3C RDF Working Group, February 2011 – June 2011, <http://www.w3.org/2011/rdf-wg/>.
- Member of IEEE, since November 2008, <http://www.ieee.org/>.
- Member of the W3C Advisory Committee, representing DERI Galway at the National University of Ireland, Galway, July 2008 – May 2009, <http://www.w3.org>.
- Member of the W3C RDB2RDF Incubator Group (RDB2RDF XG), March 2008 – April 2009, <http://www.w3.org/2005/Incubator/rdb2rdf/>
- Deputy chair of the Reasoning Web Summer School Steering Committee, February 2008 – May 2010, <http://reasoningweb.org/>, board member until September 2012.
- Member of the W3C Rule Interchange Format (RIF) Working Group, November 2005 – October 2010, <http://www.w3.org/2005/rules/>
- Member of the W3C Advisory Committee, representing DERI Innsbruck at the Leopold Franzens Universität Innsbruck, January 2005 to January 2006, <http://www.w3.org>.
- Member of the Semantic Web Services Language (SWSL) Committee, since November 2004, <http://www.daml.org/services/swsl/>.
- Member of the Web Service Modeling Ontology (WSMO) Working Group, since January 2004, <http://www.wsmo.org/>.
- Member of the OCG (Austrian Computer Society), since 2000, <http://www.ocg.at/>.
- Member of the ÖGAI (Austrian Society for Artificial Intelligence), since 2000, <http://www.oegai.at/>.

## 8 Publications

2018

- [1] Javier D. Fernandez, Miguel A. Martínez-Prieto, Axel Polleres, and Julian Reindorf. Hdtq: Managing rdf datasets in compressed space. In *Proceedings of the 14th European Semantic Web Conference (ESWC2017)*, Lecture Notes in Computer Science (LNCS), Heraklion, Greece, June 2018. Springer. to appear.
- [2] Cristina Baroglio, Olivier Boissier, and Axel Polleres, editors. *Transactions on Internet Technology, Special Issue: Computational Ethics and Accountability*, volume to appear. ACM, 2018. Editorial.
- [3] Stefan Bischof, Andreas Harth, Benedikt Kämpgen, Axel Polleres, and Patrik Schneider. Enriching integrated statistical open city data by combining equational knowledge and missing value imputation. *Journal of Web Semantics (JWS)*, 48:22–47, October 2018.

2017

- [1] Clemens Appl, Andreas Ekelhart, Natascha Fenz, Peter Kieseberg, Hannes Leo, Sabrina Kirrane, Axel Polleres, Alfred Taudes, Veronika Treitl, Christian Singer, and Martin Winner. Big Data, Innovation und Datenschutz, December 2017. Studie im Auftrag des Bundesministeriums für Verkehr, Innovation und Technologie (BMVIT).
- [2] Martin Beno, Kathrin Figl, Jürgen Umbrich, and Axel Polleres. Perception of key barriers in using and publishing open data. *eJournal of eDemocracy and Open Government (JeDEM)*, 9(2):134–165, December 2017.
- [3] Vadim Savenkov, Qaiser Mehmood, Jürgen Umbrich, and Axel Polleres. Counting to k, or how SPARQL 1.1 could be efficiently enhanced with top k shortest path queries. In *13th International Conference on Semantic Systems (SEMANTiCS)*, pages 97–103, Amsterdam, the Netherlands, September 2017. ACM.
- [4] Piero Bonatti, Sabrina Kirrane, Axel Polleres, and Rigo Wenning. Transparent personal data processing: The road ahead. In *TELERISE: 3rd International Workshop on TEchnical and LEgal aspects of data pRivacy and SEcurity @ SAFECOMP2017*, volume 10489 of *Lecture Notes in Computer Science (LNCS)*, pages 337–349, Trento, Italy, September 2017.
- [5] Sebastian Neumaier, Axel Polleres, Simon Steyskal, and Jürgen Umbrich. Data integration for open data on the web. In Giovambattista Ianni, Domenico Lembo, Leopoldo E. Bertossi, Wolfgang Faber, Birte Glimm, Georg Gottlob, and Steffen Staab, editors, *Reasoning Web. Semantic Interoperability on the Web (Reasoning Web 2017)*, volume 10370 of *Lecture Notes in Computer Science (LNCS)*, pages 1–28. Springer, Lodon, United Kingdom, July 2017.

- [6] Erwin Filtz, Axel Polleres, Roman Karl, and Bernhard Haslhofer. The evolution of the bitcoin graph. In *Proceedings of the 1st International Data Science Conference (iDSC2017)*, Salzburg, Austria, June 2017.
- [7] Martin Beno, Kathrin Figl, Axel Polleres, and Jürgen Umbrich. Open data hopes and fears: Determining the barriers of open data. In *2017 Conference for E-Democracy and Open Government (CeDEM 2017)*, Krems, Austria, May 2017. **Nominated for best paper award.**
- [8] Albin Ahmeti, Javier Fernández, Axel Polleres, and Vadim Savenkov. Updating wikipedia via DBpedia mappings and SPARQL. In Eva Blomqvist, Diana Maynard, Aldo Gangemi, Rinke Hoekstra, Pascal Hitzler, and Olaf Hartig, editors, *Proceedings of the 14th European Semantic Web Conference (ESWC2017)*, volume 10249 of *Lecture Notes in Computer Science (LNCS)*, pages 485–501, Portorož, Slovenia, May 2017. Springer.
- [9] Javier Fernández, Sabrina Kirrane, Axel Polleres, and Simon Steyskal. Self-enforcing access control for encrypted RDF. In *Proceedings of the 14th European Semantic Web Conference (ESWC2017)*, volume 10249 of *Lecture Notes in Computer Science (LNCS)*, pages 607–622, Portorož, Slovenia, May 2017. Springer.
- [10] Sebastian Neumaier, Jürgen Umbrich, and Axel Polleres. Lifting data portals to the web of data. In *10th Workshop on Linked Data on the Web (LDOW2017)*, Perth, Australia, April 2017.

## 2016

- [1] Javier Fernández, Elmar Kiesling, Sabrina Kirrane, Julia Neuschmid, Mika Mizerski, Axel Polleres, Marta Sabou, Thomas Thurner, and Peter Wetz. *Propelling the Potential of Enterprise Linked Data in Austria: Roadmap and Report*. edition mono/monochrom, Zentagasse 31/8, A-1050 Vienna, Austria, December 2016.
- [2] Sebastian Neumaier, Jürgen Umbrich, and Axel Polleres. Challenges of mapping current CKAN metadata to DCAT. In *W3C Workshop on Data and Services Integration*, Amsterdam, the Netherlands, November 2016.
- [3] Sebastian Neumaier, Jürgen Umbrich, Josiane Parreira, and Axel Polleres. Multi-level semantic labelling of numerical values. In *Proceedings of the 15th International Semantic Web Conference (ISWC 2016) - Part I*, volume 9981 of *Lecture Notes in Computer Science (LNCS)*, pages 428–445, Kobe, Japan, October 2016. Springer. **Nominated for best student paper award.**
- [4] Sebastian Neumaier, Jürgen Umbrich, and Axel Polleres. Automated quality assessment of metadata across open data portals. *ACM Journal of Data and Information Quality (JDIQ)*, 8(1):2, November 2016.

- [5] Giray Havur, Cristina Cabanillas, Jan Mendling, and Axel Polleres. Resource allocation with dependencies in business process management systems. In *Business Process Management Forum - BPM Forum 2016*, volume 260 of *Lecture Notes in Business Information Processing*, pages 3–19, Rio de Janeiro, Brazil, September 2016. Springer.
- [6] Javier David Fernández Garcia, Jürgen Umbrich, Magnus Knuth, and Axel Polleres. Evaluating query and storage strategies for RDF archives. In *12th International Conference on Semantic Systems (SEMANTiCS)*, ACM International Conference Proceedings Series, pages 41–48. ACM, September 2016.
- [7] Mónica Posada-Sánchez, Stefan Bischof, and Axel Polleres. Extracting geo-semantics about cities from openstreetmap. In *Proceedings of the Posters and Demos Track of the 12th International Conference on Semantic Systems (SEMANTiCS2016)*, Leipzig, Germany, September 2016.
- [8] Johann Mitlöhner, Sebastian Neumaier, Jürgen Umbrich, and Axel Polleres. Characteristics of open data CSV files. In *2nd International Conference on Open and Big Data*, August 2016. Invited paper.
- [9] Albin Ahmeti, Javier D. Fernández, Axel Polleres, and Vadim Savenkov. Towards updating Wikipedia via DBpedia mappings and SPARQL. In *Alberto Mendelzon International Workshop on Foundations of Data Management (AMW2016)*, Panama City, Panama, June 2016. Short paper.
- [10] Claudio Gutierrez, Aidan Hogan, Daniel Hernández, and Axel Polleres. Certain answers for SPARQL? In *Alberto Mendelzon International Workshop on Foundations of Data Management (AMW2016)*, Panama City, Panama, June 2016. Short paper.
- [11] Axel Polleres, Juan Reutter, and Egor V. Kostylev. Nested constructs vs. sub-selects in SPARQL. In *Alberto Mendelzon International Workshop on Foundations of Data Management (AMW2016)*, Panama City, Panama, June 2016.
- [12] Albin Ahmeti, Diego Calvanese, Axel Polleres, and Vadim Savenkov. Handling inconsistencies due to class disjointness in SPARQL updates. In Harald Sack, Eva Blomqvist, Mathieu d’Aquin, Chiara Ghidini, Simone Paolo Ponzetto, and Christoph Lange, editors, *Proceedings of the 13th European Semantic Web Conference (ESWC2016)*, volume 9678 of *Lecture Notes in Computer Science (LNCS)*, pages 387–404, Heraklion, Greece, June 2016. Springer.
- [13] Marta Borriello, Christian Dirschl, Axel Polleres, Phil Ritchie, Frank Salliau, Felix Sasaki, and Giannis Stoitsis. From xml to rdf step by step: approaches for leveraging xml workflows with linked data. In *XML Prague 2016 – Conference Proceedings*, pages 121–138, Prague, Czech Republic, February 2016.



## 2015

- [1] Cristina Cabanillas, Jan Mendling, Axel Polleres, and Alois Haselböck. Safety-critical human- and data-centric process management in engineering projects. In *Proceedings of the 5th International Symposium on Data-driven Process Discovery and Analysis (SIMPDA 2015)*, volume 1527 of *CEUR Workshop Proceedings*, pages 145–148, Vienna, Austria, December 2015. CEUR-WS.org.
- [2] Axel Polleres. Das neue Berufsbild “Data Scientist”. *OCG Journal*, 03/2015:13–16, 2015. Invited article (in German).
- [3] Stefan Belk, Gerhard Wohlgenannt, and Axel Polleres. Exploring and exploiting(?) the awkward connections between SKOS and OWL. In Jeff Z. Pan and Serena Villata, editors, *ISWC 2015 Posters & Demos*, volume 1486 of *CEUR Workshop Proceedings*, Bethlehem, Pennsylvania, October 2015. CEUR-WS.org. Poster abstract.
- [4] Stefan Bischof, Christoph Martin, Axel Polleres, and Patrik Schneider. Collecting, integrating, enriching and republishing open city data as linked data. In Marcelo Arenas, Oscar Corcho, Elena Simperl, Markus Strohmaier, Mathieu d’Aquin, Kavitha Srinivas, Paul T. Groth, Michel Dumontier, Jeff Heflin, Krishnaprasad Thirunarayan, and Steffen Staab, editors, *Proceedings of the 14th International Semantic Web Conference (ISWC 2015) - Part II*, volume 9367 of *Lecture Notes in Computer Science (LNCS)*, pages 57–75, Bethlehem, Pennsylvania, October 2015. Springer.
- [5] Jürgen Umbrich, Sebastian Neumaier, and Axel Polleres. Quality assessment & evolution of open data portals. In *IEEE International Conference on Open and Big Data*, Rome, Italy, August 2015. **Best paper award**.
- [6] Giray Havur, Cristina Cabanillas, Axel Polleres, and Jan Mendling. Automated Resource Allocation in Business Processes with Answer Set Programming. In *11th International Workshop on Business Process Intelligence 2015*, Innsbruck, Austria, August 2015.
- [7] Saimir Bala, Cristina Cabanillas, Jan Mendling, Andreas Rogge-Solti, and Axel Polleres. Mining project-oriented business processes. In *13th International Conference on Business Process Management (BPM 2015)*, volume 9253 of *Lecture Notes in Computer Science*, pages 425–440, Innsbruck, Austria, August 2015. Springer.
- [8] Simon Steyskal and Axel Polleres. Towards formal semantics for ODRL policies. In *9th International Web Rule Symposium (RuleML2015)*, number 9202 in *Lecture Notes in Computer Science (LNCS)*, pages 360–375, Berlin, Germany, August 2015. Springer.
- [9] Albin Ahmeti, Diego Calvanese, Vadim Savenkov, and Axel Polleres. Dealing with Inconsistencies due to Class Disjointness in SPARQL Update. In *28th International Workshop on Description Logics (DL2015)*, Athens, Greece, June 2015.

- [10] Stefan Bischof, Markus Krötzsch, Axel Polleres, and Sebastian Rudolph. Schema-agnostic query rewriting for OWL QL. In *28th International Workshop on Description Logics (DL2015)*, Athens, Greece, June 2015. Extended Abstract (full paper at ISWC2014).
- [11] Stefan Bischof, Christoph Martin, Axel Polleres, and Patrik Schneider. Open City Data Pipeline: Collecting, Integrating, and Predicting Open City Data. In *4th Workshop on Knowledge Discovery and Data Mining Meets Linked Open Data (Know@LOD)*, Portoroz, Slovenia, May 2015.
- [12] Jürgen Umbrich, Sebastian Neumaier, and Axel Polleres. Towards assessing the quality evolution of open data portals. In *ODQ2015: Open Data Quality: from Theory to Practice Workshop*, Munich, Germany, March 2015.
- [13] Jürgen Umbrich, Aidan Hogan, Axel Polleres, and Stefan Decker. Link traversal querying for a diverse web of data. *Semantic Web – Interoperability, Usability, Applicability (SWJ)*, 6(6):585–624, 2015.

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- [1] Axel Polleres. SPARQL. In Reda Alhajj and Jon G. Rokne, editors, *Encyclopedia of Social Network Analysis and Mining*, pages 1960–1966. Springer, 2014.
- [2] Stefan Bischof, Markus Krötzsch, Axel Polleres, and Sebastian Rudolph. Schema-agnostic query rewriting in SPARQL 1.1. In *Proceedings of the 13th International Semantic Web Conference (ISWC 2014)*, Lecture Notes in Computer Science (LNCS). Springer, October 2014.
- [3] Carlos Buil-Aranda, Axel Polleres, and Jürgen Umbrich. Strategies for executing federated queries in SPARQL1.1. In *Proceedings of the 13th International Semantic Web Conference (ISWC 2014)*, Lecture Notes in Computer Science (LNCS). Springer, October 2014.
- [4] Albin Ahmeti, Diego Calvanese, and Axel Polleres. Updating RDFS ABoxes and TBoxes in SPARQL. In *Proceedings of the 13th International Semantic Web Conference (ISWC 2014)*, Lecture Notes in Computer Science (LNCS). Springer, October 2014.
- [5] Daniele Dell’Aglio, Axel Polleres, Nuno Lopes, and Stefan Bischof. Querying the web of data with XSPARQL 1.1. In *ISWC2014 Developers Workshop*, volume 1268 of *CEUR Workshop Proceedings*. CEUR-WS.org, October 2014.
- [6] Pascal Hitzler, Jens Lehmann, and Axel Polleres. Logics for the semantic web. In Dov M. Gabbay, Jörg H. Siekmann, and John Woods, editors, *Computational Logic*, volume 9 of *Handbook of the History of Logic*, pages 679–710. Elsevier, 2014.

- [7] Gottfried Schenner, Stefan Bischof, Axel Polleres, and Simon Steyskal. Integrating distributed configurations with RDFS and SPARQL. In *16th International Configuration Workshop*, Novi Sad, Serbia, September 2014.
- [8] Aidan Hogan, Marcelo Arenas, Alejandro Mallea, and Axel Polleres. Everything you always wanted to know about blank nodes. *Journal of Web Semantics (JWS)*, 27:42–69, 2014.
- [9] Albin Ahmeti, Diego Calvanese, and Axel Polleres. SPARQL Update for Materialized Triple Stores under DL-Lite<sub>RDFS</sub> Entailment. In *27th International Workshop on Description Logics (DL2014)*, Vienna, Austria, July 2014.
- [10] Carlos Buil-Aranda and Axel Polleres. In Georg Gottlob and Jorge Pérez, editors, *Alberto Mendelzon International Workshop on Foundations of Data Management (AMW2014)*, volume 1189 of *CEUR Workshop Proceedings*. CEUR-WS.org, June 2014.
- [11] Jürgen Umbrich, Marcel Karnstedt, Axel Polleres, and Kai-Uwe Sattler. Index-based source selection and optimization. In Katja Hose, Ralf Schenk, and Andreas Harth, editors, *Linked Data Management*, pages 311–337. Chapman and Hall/CRC, May 2014.

## 2013

- [1] Marina Gueroussova, Axel Polleres, and Sheila A. McIlraith. SPARQL with qualitative and quantitative preferences. In Emanuele Della Valle, Markus Krötzsch, Stefan Schlobach, and Irene Celino, editors, *2nd International Workshop on Ordering and Reasoning (OrdRing 2013)*, CEUR Workshop Proceedings, Sydney, Australia, October 2013. CEUR-WS.org. Position Paper. Technical Report version available at: <ftp://ftp.cs.toronto.edu/csr/technical-reports/619/619.pdf>.
- [2] Albin Ahmeti and Axel Polleres. SPARQL update under RDFS entailment in fully materialized and redundancy-free triple stores. In *2nd International Workshop on Ordering and Reasoning (OrdRing 2013)*, CEUR Workshop Proceedings, Sydney, Australia, October 2013. CEUR-WS.org.
- [3] Simon Steyskal and Axel Polleres. Mix’n’match: Iteratively combining ontology matchers in an anytime fashion. In *8th International Workshop on Ontology Matching*, volume 111 of *CEUR Workshop Proceedings*, Sydney, Australia, October 2013. CEUR-WS.org. Extended version available at: <http://www.steyskal.info/om2013/extendedversion.pdf>.
- [4] Simon Steyskal and Axel Polleres. Mix’n’match: An alternative approach for combining ontology matchers. In *12th International Conference on Ontologies, DataBases, and Applications of Semantics (ODBASE 2013)*, Lecture Notes in Computer Science (LNCS), Graz, Austria, September 2013. Springer. Short paper.

- [5] Axel Polleres. Building blocks for a linked data ecosystem. In Andreas Harth, Craig A. Knoblock, Kai-Uwe Sattler, and Rudi Studer, editors, *Report from Dagstuhl Seminar 13252 Interoperation in Complex Information Ecosystems*, pages 116–118. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, June 2013. Position Statement.
- [6] Axel Polleres, Melanie Frühstück, Gottfried Schenner, and Gerhard Friedrich. Debugging non-ground ASP programs with choice rules, cardinality constraints and weight constraints. In Pedro Cabalar and Tran Cao Son, editors, *Proceedings of the 12th International Conference on Logic Programming and Nonmonotonic Reasoning (LPNMR-2013)*, volume 8148 of *Lecture Notes in Computer Science (LNCS)*, pages 452–464, Corunna, Spain, September 2013. Springer.
- [7] Stefan Bischof, Axel Polleres, and Simon Sperl. City data pipeline - a system for making open data useful for cities. In Steffen Lohmann, editor, *Proceedings of the ISEMANTICS 2013 Posters & Demonstrations Track*, volume 1026 of *CEUR Workshop Proceedings*, pages 45–49, Graz, Austria, September 2013. CEUR-WS.org.
- [8] Axel Polleres, Aidan Hogan, Renaud Delbru, and Jürgen Umbrich. RDFS & OWL reasoning for linked data. In Sebastian Rudolph, Georg Gottlob, Ian Horrocks, and Frank van Harmelen, editors, *Reasoning Web. Semantic Technologies for Intelligent Data Access (Reasoning Web 2013)*, volume 8067 of *Lecture Notes in Computer Science (LNCS)*, pages 91–149. Springer, Mannheim, Germany, July 2013.
- [9] Stefan Bischof and Axel Polleres. RDFS with attribute equations via SPARQL rewriting. In Philipp Cimiano, Oscar Corcho, Valentina Presutti, Laura Hollink, and Sebastian Rudolph, editors, *The Semantic Web: Semantics and Big Data – Proceedings of the 10th ESWC (ESWC2013)*, volume 7882 of *Lecture Notes in Computer Science (LNCS)*, pages 335–350, Montpellier, France, May 2013. Springer.
- [10] Reinhard Pichler, Axel Polleres, Sebastian Skritek, and Stefan Woltran. Complexity of redundancy detection on rdf graphs in the presence of rules, constraints, and queries. *Semantic Web – Interoperability, Usability, Applicability (SWJ)*, 4(4), 2013.
- [11] Javier D. Fernández, Miguel A. Martínez-Prieto, Claudio Gutiérrez, Axel Polleres, and Mario Arias. Binary RDF Representation for Publication and Exchange (HDT). *Journal of Web Semantics (JWS)*, 19(2), 2013.
- [12] Ratnesh Sahay, Antoine Zimmermann, Ronan Fox, Axel Polleres, and Manfred Hauswirth. A formal investigation of semantic interoperability of HCLS systems. In Miguel-Angel Sicilia and Pablo Serrano-Balazote, editors, *Interoperability in Healthcare Information Systems: Standards, Management, and Technology*. IGI Global, February 2013.
- [13] Axel Polleres. Agreement technologies and the semantic web. In Sascha Ossowski, editor, *Agreement Technologies*, volume 8 of *Law, Governance and Technology Series*, pages 57–68. Springer, January 2013.

- [14] Carlos Buil-Aranda, Marcelo Arenas, Oscar Corcho, and Axel Polleres. Federating queries in SPARQL1.1: Syntax, semantics and evaluation. *Journal of Web Semantics (JWS)*, 18(1), 2013.
- [15] Axel Polleres and Johannes Wallner. On the relation between SPARQL1.1 and answer set programming. *Journal of Applied Non-Classical Logics (JANCL)*, 23(1–2):159–212, 2013. Special issue on Equilibrium Logic and Answer Set Programming.
- [16] Olivier Boissier, Marco Colombetti, Michael Luck, John-Jules Meyer, and Axel Polleres. Norms, organizations, and semantics. *The Knowledge Engineering Review*, 28(1):107–116, March 2013.

## 2012

- [1] Stefan Bischof, Stefan Decker, Thomas Krennwallner, Nuno Lopes, and Axel Polleres. Mapping between RDF and XML with XSPARQL. *Journal on Data Semantics (JoDS)*, 1(3):147–185, 2012.
- [2] Axel Polleres. How (well) do datalog, SPARQL and RIF interplay? In Pablo Barceló and Reinhard Pichler, editors, *Datalog in Academia and Industry – Second International Workshop, Datalog 2.0*, volume 7494 of *Lecture Notes in Computer Science (LNCS)*, pages 27–30. Springer, September 2012. Invited tutorial, slides available at [http://www.polleres.net/presentations/20120913Datalog20\\_Tutorial.pdf](http://www.polleres.net/presentations/20120913Datalog20_Tutorial.pdf).
- [3] Jürgen Umbrich, Aidan Hogan, Axel Polleres, and Stefan Decker. Improving the recall of live linked data querying through reasoning. In Markus Krötzsch and Umberto Straccia, editors, *Web Reasoning and Rule Systems – 6th International Conference, RR2012*, volume 7497 of *Lecture Notes in Computer Science (LNCS)*, pages 188–204, Vienna, Austria, September 2012. Springer.
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- [4] Andreas Harth Aidan Hogan and Axel Polleres. Scalable authoritative owl reasoning for the web. In Amit Sheth, editor, *Semantic Services, Interoperability and Web Applications: Emerging Concepts*, pages 131–177. IGI Global, June 2011. Invited republication.
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