



DL 2016

29th International Workshop on Description Logics

April 22-25 2016, Cape Town

every day:
roof terrace



April 22

08:30 – 08:45 Welcome

08:45 – 09:45 ECCAI Sponsored Invited talk

Diego Calvanese: Managing Change in Graph-structured Data Using Description Logics

09:45 – 10:30 Existential rules

Michel Leclère, Marie-Laure Mugnier and Federico Ulliana: On Bounded Positive Existential Rules (long paper)

Cristina Civili and Riccardo Rosati: Bounded Implication for Existential Rules

10:30 – 11:00 Coffee break

11:00 – 12:30 EL

Patrick Koopmann and Nadeschda Nikitina: Minimising Acyclic EL Ontologies (long paper)

Roberto Confalonieri, Marco Schorlemmer, Oliver Kutz, Rafael Peñaloza, Enric Plaza and Manfred Eppe: Conceptual Blending in EL++

Norbert Manthey, Rafael Peñaloza and Sebastian Rudolph: Efficient Axiom Pinpointing in EL using SAT Technology

Víctor Gutiérrez Basulto, Jean Christoph Jung and Roman Kontchakov: On Decidability and Tractability of Querying in Temporal EL (long paper)

12:30 – 14:00 Lunch break

14:00 – 15:30 OBDA: Quality and Approximation

Marco Console: Data accuracy as knowledge in ontology based data access

Henriette Harmse, Arina Britz and AURORA Gerber: Armstrong Relations for Ontology Design and Evaluation

Domenico Lembo, Riccardo Rosati, Valerio Santarelli, Domenico Fabio Savo and Evgenij Thorstensen: Approaching OBDA Evolution through Mapping Repair (long paper)

Elena Botoeva, Diego Calvanese, Valerio Santarelli, Domenico Fabio Savo, Alessandro Solimando and Guohui Xiao: Virtual OBDA over Expressive Ontologies: Rewritings and Approximations (long paper)

15:30 – 16:00 Coffee break

16:00 – 17:30 Rewriting and N-ary DLs

Cristina Feier, Antti Kuusisto and Carsten Lutz: FO-Rewritability of Expressive Ontology-Mediated Queries

Meghyn Bienvenu, Peter Hansen, Carsten Lutz and Frank Wolter: First Order-Rewritability and Containment of Conjunctive Queries in Horn Description Logics (long paper)

Alessandro Artale and Enrico Franconi: Extending DLR with labelled tuples, objectification, and projections

Antti Kuusisto: On the uniform one-dimensional fragment

April 23

08:15 – 08:45 Coffee break

08:45 – 09:45 Invited talk

Birte Glimm: Ontology Materialization via Abstraction Refinement

09:45 – 10:30 Fuzzy and probabilistic DLs

Stefan Borgwardt and Rafael Peñaloza: Reasoning in Expressive Gödel Description Logics (long paper)

Ismail Ilkan Ceylan, Adnan Darwiche and Guy Van den Broeck: Open World Probabilistic Databases (Extended Abstract)

10:30 – 11:00 Coffee break

11:00 – 12:30 Nonstandard reasoning

Yizheng Zhao and Renate A. Schmidt: Forgetting Concept and Role symbols in $\text{ALCOIH}\mu^+(\text{top}, \text{and})$ -Ontologies (long paper)

Elena Botoeva, Carsten Lutz, Vladislav Ryzhikov, Frank Wolter and Michael Zakharyashev: When is Query Inseparability for ALC Ontologies Decidable? (long paper)

Jon Hael Brenas, Rachid Echahed and Martin Strecker: On the Closure of Description Logics under Substitutions

Júlia Pukancová and Martin Homola: Tableau-Based ABox Abduction for Description Logics: Preliminary Report

12:30 – 14:00 Lunch break

14:00 – 15:30 Datatypes, constraints and data explorations

André Hernich, Julio Lemos and Frank Wolter: Constraint Patterns for Tractable Ontology-Mediated Queries with Datatypes (long paper)

Sarah Alice Gaggl, Sebastian Rudolph and Lukas Schweizer: Fixed-Domain Reasoning for Description Logics

Matthias Hengel, Stefan Woelfl and Bernhard Nebel: Reasoning about general TBoxes with spatial and temporal constraints: Implementation and optimizations (long paper)

Medina Andresel, Magdalena Ortiz and Mantas Simkus: A Compilation Technique for Interactive Ontology-mediated Data Exploration

15:30 – 16:00 Coffee break

16:00 – 17:25 Applications and extensions

Jiaoyan Chen, Huajun Chen and Jeff Z. Pan: Semantic Reasoning for Smog Disaster Analysis

Pablo Fillottrani and C. Maria Keet: A Design for Coordinated and Logics-mediated Conceptual Modelling

Sebastian Rudolph: The Curse of Finiteness: Undecidability of Database-Inspired Reasoning Problems in Very Expressive Description Logics

Diego Calvanese, Marco Montali, Fabio Patrizi and Michele Stawowy: Synthesizing and Executing Plans in Knowledge and Action Bases (long paper)

April 24

08:30 – 09:00 Coffee break

09:00 – 10:00 Invited Talk

Laura Giordano: Reasoning about typicality in preferential description logics

10:00 – 10:25 Joint session with NMR

Meghyn Bienvenu, Camille Bourgaux and François Goasdoué: Query-driven Repairing of Inconsistent DL-Lite Knowledge Bases (long paper)

10:25 – 11:00 Coffee break

11:00 – 12:30 Joint session with NMR

Özgür Lütfü Özcep: Iterated Ontology Revision by Reinterpretation (NMR Paper)

Laura Giordano and Daniele Theseider Dupre': Reasoning in a Rational Extension of SROEL

Valentina Gliozzi: A strengthening of rational closure in DLs: reasoning about multiple aspects (NMR Paper)

12:30 – 14:00 Lunch break

14:00 – 15:35 Rewriting and datalog

Meghyn Bienvenu, Stanislav Kikot, Roman Kontchakov, Vladimir Podolskii and Michael Zakharyashev: Theoretically Optimal Datalog Rewritings for OWL 2 QL Ontology-Mediated Queries (long paper)

Shqiponja Ahmetaj, Magdalena Ortiz and Mantas Simkus: Polynomial Disjunctive Datalog Rewritings of Instance Queries in Expressive Description Logics (long paper)

Ana Armas Romero, Mark Kaminski, Bernardo Cuenca Grau and Ian Horrocks: Ontology Module Extraction via Datalog Reasoning (long paper)

Antonella Poggi: On the SPARQL Direct Semantics Entailment Regime for OWL 2 QL

15:35 – 16:00 Coffee break

16:00 – 17:00 Ontology development and evaluation

Oliver Kutz, Fabian Neuhaus, Maria Hedblom, Till Mossakowski and Mihai Codrescu: Ontology Patterns with DOWL: The Case of Blending

Ralph Schäfermeier and Adrian Paschke: Weaving Ontology Aspects Using a Catalog of Structural Ontology Design Patterns

Zubeida Khan: Evaluation metrics in ontology modules (short paper)

Agnieszka Lawrynowicz and C. Maria Keet: The TDDonto Tool for Test-Driven Development of DL Knowledge bases (short paper)

19:00 Dinner at the Africa Cafe at 108 Shortmarket Street.

April 25

08:30 – 09:00 Coffee break

09:00 – 10:25 DLs and databases

Zhenzhen Gu: Meta-modeling Extension of Horn-SROIQ and Query Answering

Jason St. Jacques, David Toman and Grant Weddell: Object-Relational Queries over CFDI_{nc} Knowledge Bases: OBDA for the SQL-Literate (long paper)

Marie-Laure Mugnier, Marie-Christine Rousset and Federico Ulliana: Ontology-Mediated Queries for NOSQL Databases

Elena Botoeva, Diego Calvanese, Benjamin Cogrel, Martin Rezk and Guohui Xiao: OBDA Beyond Relational DBs: A Study for MongoDB

10:25 – 10:55 Coffee break

10:55 – 12:10 Business meeting

12:10 – 13:10 Invited talk

Dan Suciu: Lifted Inference in Probabilistic Database

