



# 27<sup>th</sup> International Workshop on Description Logics (DL 2014) 17–20 July 2014, Vienna

		Thursday, July 17 <sup>th</sup>
08:45-10:15	FLoC Panel	Nina Amla, Georg Gottlob, Falk Reckling, Sweitze Roffel and Andrei Voronkov Publication Models in Computing Research: Is a Change Needed? Are We Ready for a Change?
10:15-10:45		Coffee Break (in the Gußhausstraße building (EI))
10:45-11:45	Invited Talk	Michael Benedikt New Perspectives on Query Reformulation
11:45-12:35	Talks	Pierre Bourhis, Michael Morak and Andreas Pieris Acyclic Query Answering under Guarded Disjunctive Existential Rules and Consequences to DLs
		Markus Krötzsch and Sebastian Rudolph Complexities of Nominal Schemas
		Ali Rezaei Divroodi Comparing the Expressiveness of Description Logics
		Nicolas Matentzoglu, Bijan Parsia and Uli Sattler An Empirical Investigation of Difficulty of Subsets of Description Logic Ontologies
		Viachaslau Sazonau, Uli Sattler and Gavin Brown Predicting OWL Reasoners: Locally or Globally?
12:35-13:00	Poster	Yevgeny Kazakov and Pavel Klinov Bridging the Gap between Tableau and Consequence-Based Reasoning
12.33-13.00	Announcements	Tomer Kotek, Mantas Simkus, Helmut Veith and Florian Zuleger Towards a Description Logic for Program Analysis: Extending ALCQIO with Reachability
		Pierre Bourhis, Markus Krötzsch and Sebastian Rudolph How to Best Nest Regular Path Queries
		Martin Homola, Jan Kluka, Vojtěch Svátek and Miroslav Vacura Typed Higher-Order Variant of SROIQ - Why Not?
		Maurizio Lenzerini, Lorenzo Lepore and Antonella Poggi Practical query answering over Hi (DL-Lite <sub>R</sub> ) knowledge bases
13:00-14:30		Lunch Break
	Talks	David Carral, Cristina Feier, Ana Armas Romero, Bernardo Cuenca-Grau, Pascal Hitzler and Ian Horrocks Is Your Ontology as Hard as You Think? Rewriting Ontologies into Simpler DLs
14:30-15:45		Birte Glimm, Yevgeny Kazakov, Thorsten Liebig, Trung-Kien Tran and Vincent Vialard Abstraction Refinement for Ontology Materialization
		Diego Calvanese, Tomer Kotek, Mantas Simkus, Helmut Veith and Florian Zuleger Shape and Content: Incorporating Domain Knowledge into Shape Analysis
	Poster Announcements	Liang Chang, Uli Sattler and Tianlong Gu An ABox Revision Algorithm for the Description Logic EL⊥
		Zhe Wang, Kewen Wang, Guilin Qi, Zhiqiang Zhuang and Yuefeng Li Instance-driven TBox Revision in DL-Lite
15:45-16:00		Zhiqiang Zhuang, Zhe Wang, Kewen Wang and Grigoris Antoniou Rational Elimination of DL-Lite TBox Axioms
		Laura Giordano, Valentina Gliozzi, Nicola Olivetti and Gian Luca Pozzato Rational closure in SHIQ
		Kody Moodley, Thomas Meyer and Uli Sattler DIP: A Defeasible-Inference Platform for OWL Ontologies
16:00-16:50		Poster Session with Coffee
		Yevgeny Kazakov and Pavel Klinov Goal-Directed Tracing of Inferences in EL Ontologies
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16.50.18.30	Talke	Michel Ludwig and Rafael Peñaloza Brave and Cautious Reasoning in EL
16:50-18:30	Talks	
16:50-18:30	Talks	Brave and Cautious Reasoning in EL  Franz Baader and Barbara Morawska







		Friday, July 18th
08:45-09:45	Invited Talk	Patrick Blackburn Fragments of Logic, Language, and Computation
09:45-10:15	Talks (joint with NMR)	Olivier Fernandez Gil On the Non-Monotonic Description Logic ALC+Tmin
10:15-10:45		Coffee Break
10:45-12:00	Talks (joint with NMR)	Thomas Eiter, Michael Fink and Daria Stepanova Towards Practical Deletion Repair of Inconsistent DL-programs  Wenzhao Qiao and Nico Roos
		An Argumentation System for Reasoning with Conflict-minimal Paraconsistent ALC
		Camille Bourgaux, Meghyn Bienvenu and François Goasdoué Querying Inconsistent Description Logic Knowledge Bases under Preferred Repair Semantics
12:00-12:50	Talks	Alessandro Artale, Roman Kontchakov, Alisa Kovtunova, Vladislav Ryzhikov, Frank Wolter and Michael Zakharyaschev Temporal OBDA with LTL and DL-Lite
		Szymon Klarman and Thomas Meyer Complexity of Temporal Query Abduction in DL-Lite
	Poster Announcements	Jared Leo, Ulrike Sattler and Bijan Parsia Temporalising EL Concepts with Time Intervals
12:50-13:00		E. A. Nasubo Ongoma, C. Maria Keet and Thomas Meyer Transition Constraints for Temporal Attributes
		Özgür Lütfü Özcep, Ralf Möller and Christian Neuenstadt A Stream-Temporal Query Language for Ontology Based Data Access
13:00-14:30		Lunch Break
14:30-15:20	Talks	Stefan Borgwardt, José A. Leyva Galano and Rafael Peñaloza Gödel FL₀ with Greatest Fixed-Point Semantics
		Stefan Borgwardt Fuzzy DLs over Finite Lattices with Nominals
	Poster Announcements	Fernando Bobillo and Umberto Straccia  A MILP-based decision procedure for the (Fuzzy) Description Logic ALCB
		Marco Cerami and Umberto Straccia Complexity sources in FDL
		Stefan Borgwardt, Felix Distel and Rafael Peñaloza Gödel Description Logics with General Models
		Rafael Peñaloza, Veronika Thost and Anni-Yasmin Turhan Certain Answers in a Rough World
15:20-15:50		Ismail Ilkan Ceylan and Rafael Peñaloza Bayesian Description Logics
		Ala Djeddai, Hassina Seridi and Tarek Khadir Reasoning about Belief Uncertainty in DL-Lite <sub>N,bool</sub>
		Federico Cerutti, Geeth de Mel, Timothy Norman, Nir Oren, Artemis Parvizi, Paul Sullivan and Alice Toniolo Obfuscation of Semantic Data: Restricting the Spread of Sensitive Information
		Tahani Alsubait, Bijan Parsia and Uli Sattler Measuring Conceptual Similarity in Ontologies: How Bad is a Cheap Measure?
		Andreas Ecke, Rafael Peñaloza and Anni-Yasmin Turhan Mary, What's Like All Cats?
15:50-16:40		Poster Session with Coffee
16:40-17:30	Talks	Mark Kaminski, Yavor Nenov and Bernardo Cuenca Grau Datalog Rewriting Techniques for Non-Horn Ontologies
		Meghyn Bienvenu, Stanislav Kikot and Vladimir Podolskii Succinctness of Query Rewriting in OWL 2 QL: The Case of Tree-like Queries
18:00-23:30		Social Event and Dinner







	Saturday, July 19 <sup>th</sup>				
08:45-10:15	FLoC Panel	Fahiem Bacchus, Armin Biere, Byron Cook, Joel Ouaknine, Karem Sakallah and Mirek Truszczynski Computational Complexity and Logic: Theory vs. Experiments			
10:15-10:45		Coffee Break			
10:45-11:45	Invited Talk	Alon Halevy Structured Data on the Web (or, a Personal Journey Away From and Back To Ontologies)			
11:45-12:35	Talks	Bernardo Cuenca Grau, Evgeny Kharlamov, Dmitriy Zheleznyakov, Marcelo Arenas and Sarunas Marciuska On Faceted Search over Knowledge Bases			
		David Toman and Grant Weddell Pushing the CFDnc Envelope			
	Poster Announcements	Ahmet Soylu, Evgeny Kharlamov, Dmitriy Zheleznyakov, Ernesto Jimenez-Ruiz, Martin Giese and Ian Horrocks OptiqueVQS: Visual Query Formulation for OBDA			
		Domenico Lembo, Riccardo Rosati, Marco Ruzzi, Domenico Fabio Savo and Emanuele Tocci Visualization and management of mappings in ontology-based data access (progress report)			
		Marco Console, Domenico Lembo, Valerio Santarelli and Domenico Fabio Savo Graphol: Ontology representation through diagrams			
12:35-13:00		Marco Console and Maurizio Lenzerini Reducing global consistency to local consistency in Ontology-based Data Access			
12.00 10.00		Diego Calvanese, Wolfgang Fischl, Reinhard Pichler, Emanuel Sallinger and Mantas Simkus Expressive Identification Constraints to Capture Functional Dependencies in Description Logics			
		Giorgos Stoilos OBDA Using RL Reasoners and Repairing			
		Yuri Malheiros and Fred Freitas  A Method to Develop Description Logic Ontologies Iteratively with Automatic Requirement Traceability			
		Jieying Chen, Michel Ludwig, Yue Ma and Dirk Walther Evaluation of Extraction Techniques for Ontology Excerpts			
13:00-14:30		Lunch Break			
14:30-15:45	Talks	Elena Botoeva, Roman Kontchakov, Vladislav Ryzhikov, Frank Wolter and Michael Zakharyaschev Query Inseparability by Games			
		Michel Ludwig and Dirk Walther Detecting Conjunctive Query Differences between ELHr-Terminologies using Hypergraphs			
		Patrick Koopmann and Renate A. Schmidt Forgetting and Uniform Interpolation for ALC-Ontologies with ABoxes			
	Poster Announcements	Ken Halland, Arina Britz and Szymon Klarman TBox abduction in ALC using a DL tableau			
		Fredrik Engström, Abdul Rahim Nizamani and Claes Strannegård Understandable Explanations in Description Logic			
15:45-16:00		Yahia Chabane, Christophe Rey and Farouk Toumani WApproximation: computing approximate answers for ontological queries			
		Yue Ma and Rafael Peñaloza Towards Parallel Repair: An Ontology Decomposition-based Approach			
		Michaël Thomazo Analyzing the Complexity of Consistent Query Answering under Existential Rules			
16:00-16:50		Poster Session with Coffee			
	Talks	Yujiao Zhou, Yavor Nenov, Bernardo Cuenca Grau and Ian Horrocks Pay-as-you-go Ontology Query Answering Using a Datalog Reasoner			
16:50-18:30		Giorgos Stoilos and Giorgos Stamou Hybrid Query Answering Over DL Ontologies			
		Andreas Steigmiller, Birte Glimm and Thorsten Liebig Optimised Absorption for Expressive Description Logics			
		Shqiponja Ahmetaj, Diego Calvanese, Magdalena Ortiz and Mantas Simkus Planning Problems for Graph Structured Data in Description Logics			
18:30-18:45		ORE Competition Results			







Sunday, July 20 <sup>th</sup>				
09:00-10:15	Talks	William Gatens, Boris Konev and Frank Wolter Lower and Upper Approximations for Depleting Modules of Description Logic Ontologies  Francisco Martin-Recuerda and Dirk Walther Axiom Dependency Hypergraphs for Fast Modularisation and Atomic Decomposition  Chiara Del Vescovo and Rafael Peñaloza DeaLing with Ontologies using CODs		
10:15-10:45	Coffee Break			
10:45-13:00	Talks	Bernardo Cuenca Grau, Evgeny Kharlamov, Egor Kostylev and Dmitriy Zheleznyakov Controlled Query Evaluation over Lightweight Ontologies  Peter Hansen, Carsten Lutz, Inanc Seylan and Frank Wolter Query Rewriting under EL TBoxes: Efficient Algorithms  Boris Motik, Yavor Nenov, Robert Piro, Ian Horrocks and Dan Olteanu Parallel OWL 2 RL Materialisation in Centralised, Main-Memory RDF Systems  Albin Ahmeti, Diego Calvanese and Axel Polleres SPARQL Update for Materialized Triple Stores under DL-Literoff Entailment  Egor V. Kostylev, Juan L. Reutter and Domagoj Vrgoc XPath for DL-Lite Ontologies		
13:00-13:30		Lunch Break		
13:30-14:30		DL Business Meeting		

#### **Location Information**

## Registration Desk

You have to register in order to participate in DL and other VSL events. You will receive your badge and all other materials at the registration desk. Please register before DL begins. The registration desk is located in:

- Freihaus Building (FH), 1<sup>st</sup> floor, in front of Hörsaal 1 (area: red)
- Address: Wiedner Hauptstraße 8-10, 1040 Vienna
- Opening hours: 8:00–18:00 daily (you can register for DL already on July 16)
- Subway: U1, U2, U4 (station name: Karlsplatz, station exit: Wiedner Hauptstr.)

# FLoC Panels

FLoC panels will be held in:

- Freihaus Building (FH), Hörsaal 1 (area: red)
- Address: Wiedner Hauptstraße 8-10, 1040 Vienna
- Subway: U1, U2, U4 (station name: Karlsplatz, station exit: Wiedner Hauptstr.)

# DL Talks, Posters and Coffee

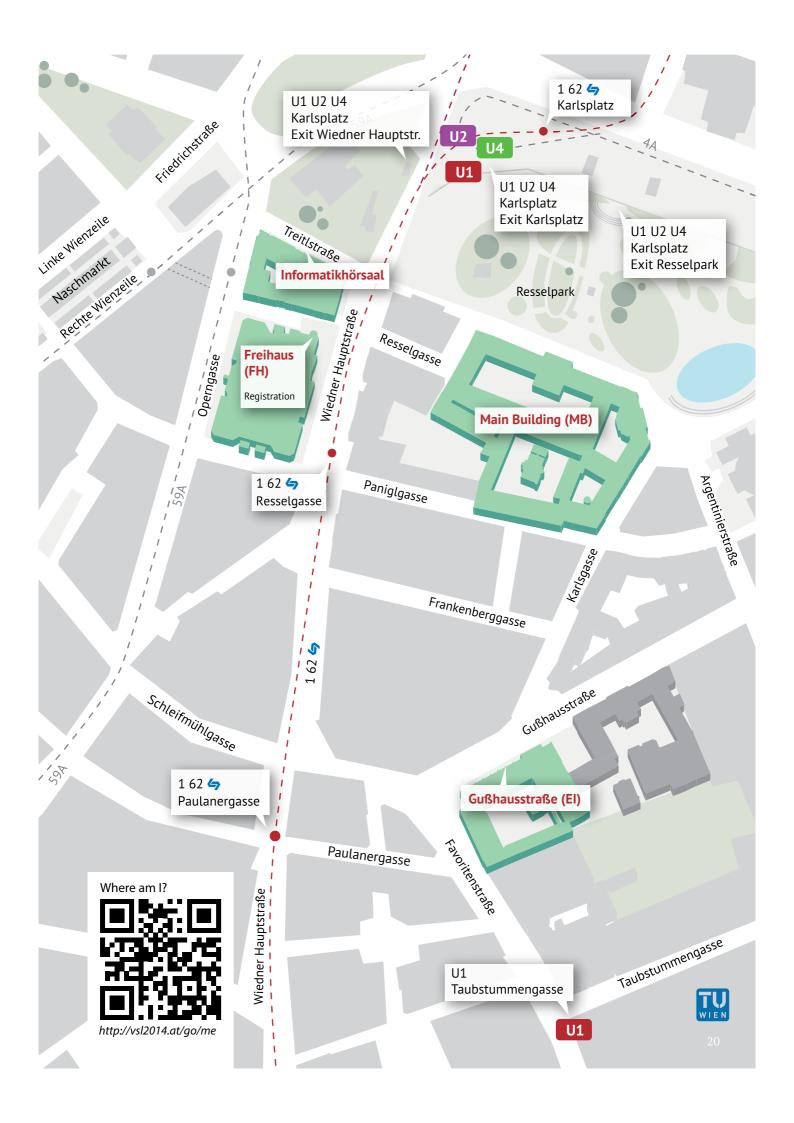
All DL sessions (invited and regular talks, posters sessions) and coffee breaks will take place in:

- Gußhausstraße building (EI), Hörsaal EI 7
- Address: Gußhausstraße 25-29, 1040 Vienna
- Subway: U1, U2, U4 (station name: Karlsplatz, station exits: Karlsplatz, Resselpark),
   U1 (station name:Taubstummengasse, station exit: Taubstummengasse)









#### Social Events

The social program of DL 2014 consists of

- a joint DL/NMR welcome reception on July 17, and
- a guided tour in the Musikverein followed by a dinner at Castle Wilhelminenberg on July 18.

## Welcome Reception

The joint DL/NMR welcome reception will take place on **July 17**, **19:00-21:00**, in **Nelson's Bar** in one of the courts at the TU Vienna main building.

• Address: Paniglgasse 14, 1040 Vienna (see the DL 2014 homepage for a map).

#### Musikverein

On **July 18 at 18:00**, we will have a guided tour in the Musikverein. We will walk to the Musikverein after the last session on July 18. The meeting place and time for walking there together is **the ground floor of the Gußhausstraße building (EI) at 17:40**.

Address: Musikvereinsplatz 1, 1010 Vienna (see the DL 2014 homepage for a map)

After the guided tour, **at 19:00** buses (operated by the Dr. Richard bus company) will depart to Castle Wilhelminenberg. Buses will pick us up in front of the Musikverein building.

## Castle Wilhelminenberg

The workshop dinner will take place at Castle Wilhelminenberg, located in the north-western outskirts of Vienna.

Castle Wilhelminenberg was built between 1781 and 1784 as a hunting castle for Count Lascy, an Austrian aristocrat. In 1988 it was renovated and reformed into the current hotel. You can read more about its history here.

• Address: Savoyenstraße 2, 1160 Vienna (see the DL 2014 homepage for a map)

As mentioned above, there will be shuttle buses to Castle Wilhelminenberg leaving at **19:00 from the Musikverein**. There will be buses to bring us back to the Musikverein, **leaving Castle Wilhelminenberg at 23:30**.

If you prefer to go to the dinner directly by public transport, you can take the following connections:

- From station Karlsplatz, take the metro line U1 to Stephansplatz.
- Change to metro line U3 to Ottakring.
- At Ottakring, take bus 46B or 146B heading for Wilhelminenberg and get off at the stop Schloss Wilhelminenberg.





