

Advanced Topics in Foundations of Databases, 2017/18

Material for Final Project and Essays

The references are taken from DBLP (<http://dblp.uni-trier.de>), the main bibliographical source for computer science research. You can search DBLP by authors' names, to find those papers. Once they are found, clicking on the electronic edition icon next to the paper gives you access to the source, as long as you are accessing the site from the UoE network (it will *not* work elsewhere). If for an occasional paper it does not work (there should be very few exceptions, if any), try entering the title, in quotes, as well as pdf in a google search, and you should find copies on authors' webpages.

Topic 6: Ontology-Based Data Access (OBDA)

1. Mario Alviano, Andreas Pieris: Default Negation for Non-Guarded Existential Rules. PODS 2015: 79-90
2. Jean-François Baget, Meghyn Bienvenu, Marie-Laure Mugnier, Swan Rocher: Combining Existential Rules and Transitivity: Next Steps. IJCAI 2015: 2720-2726
3. Jean-François Baget, Michel Leclère, Marie-Laure Mugnier, Eric Salvat: On rules with existential variables: Walking the decidability line. Artif. Intell. 175(9-10): 1620-1654 (2011)
4. Jean-François Baget, Marie-Laure Mugnier, Sebastian Rudolph, Michaël Thomazo: Walking the Complexity Lines for Generalized Guarded Existential Rules. IJCAI 2011: 712-717
5. Gerald Berger, Andreas Pieris: Ontology-Mediated Queries Distributing over Components. IJCAI 2016: 943-949
6. Meghyn Bienvenu, Balder ten Cate, Carsten Lutz, Frank Wolter: Ontology-Based Data Access: A Study through Disjunctive Datalog, CSP, and MMSNP. ACM Trans. Database Syst. 39(4): 33:1-33:44 (2014)
7. Meghyn Bienvenu, Magdalena Ortiz, Mantas Simkus, Guohui Xiao: Tractable Queries for Lightweight Description Logics. IJCAI 2013: 768-774
8. Pierre Bourhis, Marco Manna, Michael Morak, Andreas Pieris: Guarded-Based Disjunctive Tuple-Generating Dependencies. ACM Trans. Database Syst. 41(4): 27:1-27:45 (2016)
9. Andrea Cali, Georg Gottlob, Michael Kifer: Taming the Infinite Chase: Query Answering under Expressive Relational Constraints. J. Artif. Intell. Res. (JAIR) 48: 115-174 (2013)
10. Andrea Cali, Georg Gottlob, Thomas Lukasiewicz: A general Datalog-based framework for tractable query answering over ontologies. J. Web Sem. 14: 57-83 (2012)
11. Andrea Cali, Georg Gottlob, Andreas Pieris: Towards more expressive ontology languages: The query answering problem. Artif. Intell. 193: 87-128 (2012)

12. Diego Calvanese, Giuseppe De Giacomo, Domenico Lembo, Maurizio Lenzerini, Riccardo Rosati: Tractable Reasoning and Efficient Query Answering in Description Logics: The DL-Lite Family. *J. Autom. Reasoning* 39(3): 385-429 (2007)
13. Georg Gottlob, André Hernich, Clemens Kupke, Thomas Lukasiewicz: Stable Model Semantics for Guarded Existential Rules and Description Logics. *KR* 2014
14. Georg Gottlob, André Hernich, Clemens Kupke, Thomas Lukasiewicz: Equality-Friendly Well-Founded Semantics and Applications to Description Logics. *AAAI* 2012
15. Georg Gottlob, Marco Manna, Andreas Pieris: Combining decidability paradigms for existential rules. *TPLP* 13(4-5): 877-892 (2013)
16. Georg Gottlob, Sebastian Rudolph, Mantas Simkus: Expressiveness of guarded existential rule languages. *PODS* 2014: 27-38
17. André Hernich, Clemens Kupke, Thomas Lukasiewicz, Georg Gottlob: Well-founded semantics for extended datalog and ontological reasoning. *PODS* 2013: 225-236
18. Carsten Lutz, Inanc Seylan, Frank Wolter: Ontology-Mediated Queries with Closed Predicates. *IJCAI* 2015: 3120-3126
19. Nhung Ngo, Magdalena Ortiz, Mantas Simkus: Closed Predicates in Description Logics: Results on Combined Complexity. *KR* 2016: 237-246