## **Advanced Topics in Foundations of Databases, 2016/17**

## **Material for Final Project and Essays**

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## **Topic 6: Graph Databases**

- 1. Isabel F. Cruz, Alberto O. Mendelzon, Peter T.Wood: A Graphical Query Language Supporting Recursion. SIGMOD Conference 1987: 323-330
- 2. Mariano P. Consens, Alberto O. Mendelzon: Low Complexity Aggregation in GraphLog and Datalog. Theor. Comput. Sci. 116(1): 95-116 (1993)
- 3. Pablo Barcelo: Querying graph databases. PODS 2013: 175-188
- 4. Renzo Angles, Claudio Gutierrez: Survey of graph database models. ACM Comput. Surv. 40(1) (2008)
- 5. Peter T. Wood: Query languages for graph databases. SIGMOD Record 41(1): 50-60 (2012)
- 6. Diego Calvanese, Giuseppe De Giacomo, Maurizio Lenzerini, Moshe Y. Vardi: Rewriting of Regular Expressions and Regular Path Queries. J. Comput. Syst. Sci. 64(3): 443-465 (2002)
- 7. Diego Calvanese, Giuseppe De Giacomo, Maurizio Lenzerini, Moshe Y. Vardi: Reasoning on regular path queries. SIGMOD Record 32(4): 83-92 (2003)
- 8. Diego Calvanese, Giuseppe De Giacomo, Maurizio Lenzerini, Moshe Y. Vardi: Containment of Conjunctive Regular Path Queries with Inverse. KR 2000: 176-185
- 9. Leonid Libkin, Wim Martens, Domagoj Vrgoc: Querying graph databases with XPath. ICDT 2013: 129-140
- 10. Pablo Barcelo, Leonid Libkin, Anthony Widjaja Lin, Peter T. Wood: Expressive Languages for Path Queries over Graph-Structured Data. ACM Trans. Database Syst. 37(4): 31 (2012)
- 11. Pablo Barcelo, Diego Figueira, Leonid Libkin: Graph Logics with Rational Relations. Logical Methods in Computer Science 9(3) (2013)
- 12. Dominik D. Freydenberger, Nicole Schweikardt: Expressiveness and Static Analysis of Extended Conjunctive Regular Path Queries. AMW 2011

- 13. Jelle Hellings, Bart Kuijpers, Jan Van den Bussche, Xiaowang Zhang: Walk logic as a framework for path query languages on graph databases. ICDT 2013: 117-128
- 14. Pablo Barcelo, Leonid Libkin, Juan L. Reutter: Querying Regular Graph Patterns. Journal of the ACM 61(1): 8:1-8:54 (2014)
- 15. Wenfei Fan, Xin Wang, Yinghui Wu: Querying big graphs within bounded resources. SIGMOD Conference 2014: 301-312
- 16. Wenfei Fan: Graph pattern matching revised for social network analysis. ICDT 2012: 8-21