

Publications of Pablo Barceló by type

Type A

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3. Marcelo Arenas, Pablo Barceló, Juan Reutter. Query Languages for Data Exchange: Beyond Unions of Conjunctive Queries. *Theory of Computing Systems (ToCS)* 49(4):489-564, Jul 2011. Springer-Verlag, Berlin/Heidelberg, Germany. ISSN 1433-0490.
4. Marcelo Arenas, Pablo Barceló, Leonid Libkin. Regular Languages of Nested Words: Fixed Points, Automata, and Synchronization. *Theory of Computing Systems (ToCS)* 49(3):639-670, 2011. Springer-Verlag, Berlin/Heidelberg, Germany. ISSN 1433-0490.
5. Pablo Barceló, Anthony Widjaja Lin, Leonid Libkin, Peter Wood. Expressive Languages for Path Queries over Graph-structured Data. *Transactions on Database Systems (TODS)* 37(4):article 31, 2012. ACM Press, New York, NY, USA. ISSN 0362-5915.
6. Pablo Barceló, Leonid Libkin, Juan Reutter. Parameterized Regular Expressions and Their Languages. *Theoretical Computer Science (TCS)* 474:21-45, Feb 2013. Elsevier Science, Amsterdam, The Netherlands. ISSN 0304-3975.
7. Pablo Barceló, Diego Figueira, Leonid Libkin. Graph Logics with Rational Relations. *Logical Methods in Computer Science (LMCS)* 9(3):article 1, Jul 2013. ISSN 1860-5974.
8. Marcelo Arenas, Pablo Barceló, Leonid Libkin, Ronald Fagin. Solutions and Query Rewriting in Data Exchange. *Information and Computation* 228:28-61, Jul 2013. Elsevier Science, Amsterdam, The Netherlands. ISSN 0890-5401.
9. Pablo Barceló, Juan Reutter, Leonid Libkin. Querying Regular Graph Patterns. *Journal of the ACM (JACM)* 61(1):article 8, Jan 2014. ACM Press, New York, NY, USA. ISSN 0004-5411.
10. Pablo Barceló, Leonid Libkin, Miguel Romero. Efficient Approximations of Conjunctive Queries. *SIAM Journal on Computing (SICOMP)* 43(3):1085-1130, 2014. SIAM Press, Philadelphia, USA. ISSN 0097-5397.
11. Pablo Barceló, Gaelle Fontaine, Anthony Widjaja Lin. Expressive Path Queries on Graph with Data. *Logical Methods in Computer Science (LMCS)* 11(4):paper 1, 2015. ISSN 1860-5974.
12. Pablo Barceló, Leonid Libkin. Order-Invariant Types and Their Applications. *Logical Methods in Computer Science (LMCS)* 12(1):Article 9, Apr 2016. ISSN 1860-5974.

13. Pablo Barceló, Miguel Romero, Moshe Vardi. Semantic Acyclicity on Graph Databases. *SIAM Journal on Computing (SICOMP)* 45(4):1339-1376, 2016. SIAM Press, Philadelphia, USA. ISSN 0097-5397.
14. Pablo Barceló, Pablo Muñoz. Graph Logics with Rational Relations: The Role of Word Combinatorics. *ACM Transactions on Computational Logic (TOCL)* 18(2):article 10, May 2017. ACM Press, New York, NY, USA. ISSN 1529-3785.
15. Pablo Barceló, Gaelle Fontaine. On the Data Complexity of Consistent Query Answering over Graph Databases. *Journal of Computer and System Sciences (JCSS)* 88:164-194, Sep 2017. Elsevier Science, Amsterdam, The Netherlands. ISSN 0022-0000.
16. Pablo Barceló, Andreas Pieris, Miguel Romero. Semantic Optimization in Tractable Classes of Conjunctive Queries. *SIGMOD Record* 46(2):5-17, Jun 2017. ACM Press, New York, NY, USA. ISSN 0163-5808.
17. Renzo Angles, Pablo Barceló, Marcelo Arenas, Aidan Hogan, Juan Reutter, Domagoj Vrgoc. Foundations of Modern Query Languages for Graph Databases. *ACM Computing Surveys (CSUR)* 50(5), Oct 2017. ACM Press, New York, NY, USA. ISSN 0360-0300.
18. Sergio Abriola, Pablo Barceló, Diego Figueira, Santiago Figueira. Bisimulations on Data Graphs. *Journal of Artificial Intelligence Research (JAIR)* 61:171-213, Jan 2018. ISSN 1076-9757.
19. Pablo Barceló, Markus Kroell, Reinhard Pichler, Sebastian Skritek. Efficient Evaluation and Static Analysis for Well-Designed Pattern Trees with Projection. *Transactions on Database Systems (TODS)* 43(2):article 8, 2018. ACM Press, New York, NY, USA. ISSN 0362-5915.
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Type H

1. Pablo Barceló. Locality of Queries. In Ling Liu and M. Tamer Özsu (ed.), *Encyclopedia of Database Systems*, pp. 1637-1638, 2009. Springer, New York, NY, USA. ISBN 978-0-387-49616-0.
2. Marcelo Arenas, Pablo Barceló, Leonid Libkin. Graph Path Navigation. In *Encyclopedia of Big Data Technologies*, Jan 2019. Springer-Verlag, Berlin/Heidelberg, Germany.

Type I

1. Pablo Barceló, ed. Special Issue on Foundations of Data Management. *Journal of Computer and System Sciences (JCSS)* 79(6):265, Sep 2013. Elsevier Science, Amsterdam, The Netherlands. ISSN 0022-0000.

2. Pablo Barceló, Ruy de Queiroz, Ulrich Kohlenbach, ed. 21st Workshop on Logic, Language, Information and Computation – WoLLIC 2014. *Information and Computation* 255(2):193-334, Aug 2017. Elsevier Science, Amsterdam, The Netherlands. ISSN 0890-5401.
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Type K

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2. Pablo Barceló, Reinhard Pichler, ed. *Proceedings of the 2nd International Workshop on Datalog (Datalog)*, Sep 2012. Vienna, Austria. Springer-Verlag, Berlin/Heidelberg, Germany. LNCS.
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4. Pablo Barceló, Lei Chen, ed. *Proceedings of the 33th ACM SIGMOD-SIGACT-SIGART Symposium on Principles of Database Systems (PODS)*, Jun 2014. Snowbird, Utah, USA. ACM Press, New York, NY, USA. ACM International Conference Proceeding Series. PhD Symposium.
5. Pablo Barceló, ed. *Proceedings of the 18th International Conference on Extending Database Technology (EDBT)*, Mar 2015. Brussels, Belgium. OpenProceedings.
6. Pablo Barceló, Heng Tao Shen, ed. *Proceedings of the 34th ACM SIGMOD-SIGACT-SIGART Symposium on Principles of Database Systems (PODS)*, 2015. Melbourne, Australia. ACM Press, New York, NY, USA. ACM International Conference Proceeding Series. PhD Symposium.
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2. Carlos Hurtado, Leonid Libkin, Peter Wood, Pablo Barceló. Expressive Languages for Path Queries over Graph-structured Data. In Jan Paredaens, Dirk van Gucht (ed.), *Proc. 29th ACM SIGMOD-SIGACT-SIGART Symposium on Principles of Database Systems (PODS)*, pp. 3-14, Jun 2010. Indianapolis, IN, USA. ACM Press, New York, NY, USA. ACM International Conference Proceeding Series. ISBN 978-1-4503-0033-9.
3. Leonid Libkin, Juan Reutter, Pablo Barceló. Querying Graph Patterns. In Maurizio Lenzerini, Thomas Schwentick (ed.), *Proc. 30th ACM SIGMOD-SIGACT-SIGART Symposium on Principles of Database Systems (PODS)*, pp. 199-210, Jun 2011. Athens, Greece. ACM Press, New York, NY, USA. ACM International Conference Proceeding Series. ISBN 978-1-4503-0660-7.
4. Pablo Barceló, Leonid Libkin, Miguel Romero. Efficient Approximations of Conjunctive Queries. In *Proc. 31st ACM SIGMOD-SIGACT-SIGART Symposium on Principles of Database Systems (PODS)*, pp. 249-260, May 2012. Scottsdale, AZ, USA. ACM Press, New York, NY, USA. ACM International Conference Proceeding Series.
5. Pablo Barceló, Diego Figueira, Leonid Libkin. Graph Logics with Rational Relations and the Generalized Intersection Problem. In *Proc. 27th ACM/IEEE Symposium on Logic in Computer Science (LICS)*, pp. 115-124, Jun 2012. Dubrovnik, Croatia. IEEE Computer Society Press, Los Alamitos, CA, USA.
6. Pablo Barceló, Jorge Pérez, Juan Reutter. Schema Mappings and Data Exchange for Graph Databases. In Wang-Chiew Tan (ed.), *Proc. 16th International Conference on Database Theory (ICDT)*, Mar 2013. Genoa, Italia. ACM Press, New York, NY, USA. ACM International Conference Proceeding Series. ISBN 978-1-4503-1598-2.
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11. Pablo Barceló, Gaelle Fontaine. On the Data Complexity of Consistent Query Answering over Graph Databases. In *Proc. 18th International Conference on Database Theory (ICDT)*, pp. 380-397, Mar 2015. Brussels, Belgium. ACM Press, New York, NY, USA. ACM International Conference Proceeding Series.
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17. Pablo Barceló, Miguel Romero, Moshe Vardi. The Homomorphism Problem for Regular Graph Patterns. In *Proc. 32nd ACM/IEEE Symposium on Logic in Computer Science (LICS)*, pp. 1-12, Jun 2017. Reykjavik, Iceland. IEEE Computer Society Press, Los Alamitos, CA, USA.
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23. Pablo Barceló, Chi Duo-Hong, Xuan Back-Le, Anthony Widjaja Lin, Reino Niskanen. Monadic Decomposability of Regular Relations. In *Proc. 46th International Colloquium on Automata, Languages, and Programming (ICALP)*, pp. 103:1-103:14, 2019.
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Type L1

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2. Pablo Barceló, Leonid Libkin, Juan Reutter. Parameterized Regular Expressions and their Languages. In Supratik Chakraborty, Amit Kumar (ed.), *Proc. 31st Annual Conference on Foundations of Software Technology and Theoretical Computer Science (FSTTCS)*, pp. 351-362, Dec 2011. Mumbai, India. IBFI Schloss Dagstuhl, Wadern, Germany. Leibniz International Proceedings in Informatics (LIPIcs) vol. 13. ISBN 978-3-939897-34-7.
3. Pablo Barceló, Gaëlle Fontaine, Anthony Widjaja Lin. Expressive Languages for Path Queries over Graphs with Data. In *Proc. 19th Logic for Programming, Artificial Intelligence, and Reasoning (LPAR)*, pp. 71-85, Dec 2013. Springer, New York, NY, USA. Lecture Notes in Computer Science. ISBN 978-3-642-45220-8.
4. Jorge Pérez, Javier Marinkovic, Pablo Barceló. On the Turing Completeness of Modern Neural Network Architectures. In *Proc. 7th International Conference on Learning Representations (ICLR)*, 2019. New Orleans, USA.

Type L2

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2. Marcelo Arenas, Pablo Barceló, Juan Reutter. Datalog as a Query language for Data Exchange Systems. In Oege de Moor, Georg Gottlob, Tim Furche, Andrew Jon Sellers (ed.), *Proc. 1st International Workshop on Datalog (Datalog)*, pp. 302-320, Mar 2010. Oxford, UK. Springer-Verlag, Berlin/Heidelberg, Germany. LNCS. ISBN 978-3-642-24205-2.
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