

Publications of Claudio Gutierrez by year

Year 2009

1. Jorge Pérez, Marcelo Arenas, Claudio Gutierrez. Semantics and complexity of SPARQL. *Transactions on Database Systems (TODS)* 34(3), 2009. ACM Press, New York, NY, USA. ISSN 0362-5915. Article 16.
2. Sergio Muñoz, Jorge Pérez, Claudio Gutierrez. Simple and Efficient Minimal RDFS. *Journal of Web Semantics (JWS)* 7(3):220-234, 2009. Elsevier Science, Amsterdam, The Netherlands. ISSN 1570-8268.
3. Mauro San Martín, Claudio Gutierrez. Representing, Querying and Transforming Social Networks with RDF/SPARQL. In Lora Aroyo, Paolo Traverso, Fabio Ciravegna, Philipp Cimiano, Tom Heath, Eero Hyvönen, Riichiro Mizoguchi, Eyal Oren, Marta Sabou, Elena Simperl (ed.), *Proc. 6th European Semantic Web Conference (ESWC)*, pp. 293-307, May 2009. Heraklion, Greece. Springer-Verlag, Berlin/Heidelberg, Germany. Lecture Notes in Computer Science vol. 5554. ISBN 3-642-02120-4.
4. Mauro San Martín, Claudio Gutierrez. Personal Management of Social Networks Data. In *Proc. International Symposium on Social Computing Applications (SCA)*, pp. 765-770, Aug 2009. Vancouver, Canada. IEEE Computer Society Press, Los Alamitos, CA, USA. Appears within Proc. CSE 2009.
5. Marcelo Arenas, Jorge Pérez, Claudio Gutierrez. Foundations of RDF Databases. In *Reasoning Web. Semantic Technologies for Information Systems.*, pp. 158-204, 2009. Springer-Verlag, Berlin/Heidelberg, Germany. ISBN 978-3-642-03753-5. Lecture Notes in Computer Science vol. 5689.
6. Sergio Tessaris, Enrico Franconi, Thomas Either, Sigfried Handschuh, Marie-Christine Rousset, Renate Schmidt, Claudio Gutierrez, ed. *Reasoning Web. Semantic Technologies for Information Systems.* 357 pages, 2009. Springer-Verlag, Berlin/Heidelberg, Germany. ISBN 978-3-642-03753-5. Lecture Notes in Computer Science vol. 5689.

Year 2010

1. Jorge Pérez, Marcelo Arenas, Claudio Gutierrez. nSPARQL: A Navigational Language for RDF. *Journal of Web Semantics (JWS)* 8(4):255-270, 2010. Elsevier Science, Amsterdam, The Netherlands. ISSN 1570-8268.
2. María Luisa Cárdenas, Juan Carlos Letelier, Athel Cornish-Bowden, Jorge Soto-Andrade, Claudio Gutierrez. Closure to Efficient Causation, Computability and Artificial Life. *Journal of Theoretical Biology (JTB)* 263(1):79-92, Mar 2010. Elsevier Science, Amsterdam, The Netherlands. ISSN 0022-5193.

3. Renzo Angles, Claudio Gutierrez. SQL Nested Queries in SPARQL. In Alberto Laender, Laks Lashmanan (ed.), *Proc. 4th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, pp. 5.1-5.12, May 2010. Buenos Aires, Argentina. CEUR Publications. CEUR Workshop Proceedings vol. 619. ISBN 1613-0073.
4. Javier Fernández, Claudio Gutierrez, Miguel Martínez-Prieto. RDF Compression: Basic Approaches. In *Proc. 19th International World Wide Web Conference (WWW)*, pp. 1091-1092, Apr 2010. Raleigh, NC, USA. ACM Press, New York, NY, USA.
5. Javier Fernández, Miguel Martínez-Prieto, Claudio Gutierrez. Compact Representation of Large RDF Data Sets for Publishing and Exchange. In *Proc. 9th International Semantic Web Conference (ISWC)*, pp. 193-208, Nov 2010. Shanghai, China.

Year 2011

1. Claudio Gutierrez, Jorge Soto-Andrade, Sebastian Jaramillo. Some Thoughts on A. H. Louies More Than Life Itself: A Reflection on Formal Systems and Biology. *Axiomathes (Axiomathes)* 21:439-454, Jul 2011. Springer, New York, NY, USA. ISSN 1122-1151.
2. Javier Fernández, Miguel Martínez-Prieto, Claudio Gutierrez. Publishing Open Statistical Data: the Spanish Census. In *Proc. 12 International Conference on Digital Government Research (DGO)*, Jun 2011. Maryland, USA.
3. Claudio Gutierrez, Carlos Hurtado, Alberto Mendelzon, Jorge Pérez. Foundations of Semantic Web Databases. *Journal of Computer and System Sciences (JCSS)* 77:520-541, 2011. Elsevier Science, Amsterdam, The Netherlands. ISSN 0022-0000.
4. Claudio Gutierrez, Alejandro Vaisman, Carlos Hurtado. RDFS Update: From Theory to Practice. In Antoniou et al. (ed.), *Proc. 8th European Semantic Web Conference (ESWC)*, pp. 93-107, Jun 2011. Heraklion, Greece. Springer-Verlag, Berlin/Heidelberg, Germany. Lecture Notes in Computer Science vol. 6644.
5. Claudio Gutierrez. Modeling the Web of Data (Introductory Overview). In *Reasoning Web. Semantic Technologies for the Web of Data*, pp. 416-444, 2011. Springer, New York, NY, USA. ISBN 978-3642230318. LNCS vol. 6848.
6. Jorge Soto Andrade, Sebastian Jaramillo, Claudio Gutierrez, Juan Carlos Letelier. Ouroboros Avatars: A Mathematical Exploration of Self-reference and Metabolic Closure. In *Proc. European Conference on Artificial Life (ECAL)*, Aug 2011. Paris, France. MIT Press, Boston, MA, USA.
7. Marcelo Arenas, Claudio Gutierrez, Jorge Pérez. Some Remarks on the Paper "semQA: SPARQL with Idempotent Disjunction". *IEEE Transactions on Knowledge and Data Engineering (TKDE)* 23(4):638-639, 2011. IEEE Press, Piscataway, NJ, USA. ISSN 1041-4347. correspondence paper.

8. Sebastian Rudolph, Claudio Gutierrez, ed. *Proceedings of the 5th Web Reasoning and Rule Systems (RR)*, 2011. Galway, Ireland. Springer-Verlag, Berlin/Heidelberg, Germany. Lecture Notes in Computer Science vol. 6902.
9. Renzo Angles, Claudio Gutierrez. Subqueries in SPARQL. In *Proc. 5th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, May 2011. Santiago, Chile. CEUR Publications. CEUR Workshop Proceedings.
10. Mauro San Martín, Claudio Gutierrez, Peter Wood. SNQL: A Social Networks Query and Transformation Language. In *Proc. 5th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, May 2011. Santiago, Chile. CEUR Publications. CEUR Workshop Proceedings.

Year 2012

1. Marcelo Arenas, Claudio Gutierrez, Daniel P. Miranker, Jorge Pérez, Juan Sequeda. Querying Semantic Web Data on the Web. *SIGMOD Record* 41(4):6-17, Dec 2012. ACM Press, New York, NY, USA. ISSN 0163-5808.
2. Juan Alvarez, Claudio Gutierrez. History of Computing in Chile, 1961-1982: Early Years, Consolidation, and Expansion. *IEEE Annals of the History of Computing (THC)* 34(3):22-33, Sep 2012. IEEE Computer Society Press, Los Alamitos, CA, USA.
3. Valeria Fionda, Claudio Gutierrez, Giuseppe Pirro. Semantic Navigation on the Web of Data: Specification of Routes, Web Fragments and Actions. In Michael Rabinovich, Steffen Staab (ed.), *Proc. 21st International World Wide Web Conference (WWW)*, pp. 281-290, Apr 2012. Lyon, France. ACM Press, New York, NY, USA. ISBN 978-1-4503-1323-0.

Year 2013

1. Claudio Gutierrez, Romain Robbes. WEON: Towards a softWare Ecosystem ONtology. In Mircea Lungu, Jens Knodel, Peter Knauber (ed.), *Proc. 1st International Workshop on Software Ecosystem Architecture (WEA)*, pp. 16-20, Aug 2013. Saint Petersburg, Russia. ACM Press, New York, NY, USA.
2. Gustavo Pabon, Claudio Gutierrez, Javier Fernández, Miguel Martínez-Prieto. Linked Open Data Technologies for Publication of Census Microdata. *Journal of the American Society for Information Science and Technology (JASIST)* 64(9):1802-1814, 2013. John Wiley & Sons, Hoboken, NJ, USA. ISSN 2330-1643.
3. Javier Fernández, Miguel Martínez-Prieto, Claudio Gutierrez, Axel Polleres. Binary RDF Representation for Publication and Exchange (HDT). *Journal of Web Semantics (JWS)* 19:22-41, 2013. Elsevier Science, Amsterdam, The Netherlands. ISSN 1570-8268.

4. Enrico Franconi, Claudio Gutierrez, Alessandro Mosca, Giuseppe Pirro, Riccardo Rosati. The Logic of Extensional RDFS. In *Proc. 12th International Semantic Web Conference (ISWC)*, pp. 101-116, Oct 2013. Sydney, Australia.

Year 2014

1. Aidan Hogan, Claudio Gutierrez. Paths towards the Sustainable Consumption of Semantic Data on the Web. In Georg Gottlob, Jorge P'erez (ed.), *Proc. 8th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, pp. 1-3, Jun 2014. Cartagena, Colombia. CEUR Publications. CEUR Workshop Proceedings.
2. Javier Fernández, Claudio Gutierrez, Miguel Martínez-Prieto, Jorge Pérez. Towards In-Memory RDFS Entailment. In Georg Gottlob, Jorge P'erez (ed.), *Proc. 8th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, pp. article 13, Jun 2014. Cartagena, Colombia. CEUR Publications. CEUR Workshop Proceedings.
3. Valeria Fionda, Claudio Gutierrez, Giuseppe Pirro. Knowledge Maps of Web Graphs. In *Proc. 14th International Conference on Principles of Knowledge Representation and Reasoning (KR)*, Jul 2014. Vienna, Austria. Association for the Advancement of Artificial Intelligence, www.aaai.org.
4. Mauro San Martín, Claudio Gutierrez. Transforming and Integrating Social Networks and Social Media Data. In *Encyclopedia of Social Network Analysis and Mining*, pp. 2202-2214, 2014. Springer Science+Business Media, Singapore, Singapore.
5. Valeria Fionda, Claudio Gutierrez, Giuseppe Pirro. The SWGET Portal: Navigating and Acting on the Web of Linked Data. *Journal of Web Semantics (JWS)* 26:29-35, 2014. Elsevier Science, Amsterdam, The Netherlands. ISSN 1570-8268.

Year 2015

1. Valeria Fionda, Giuseppe Pirro, Claudio Gutierrez. NautiLOD: A Formal Language for the Web of Data Graph. *ACM Transactions on the Web* 9(1):article 5, 2015. ACM Press, New York, NY, USA. ISSN 1559-1131.
2. Daniel Hernández, Claudio Gutierrez. Disentangling the Notion of Dataset in SPARQL. In Andrea Cali, Maria-Esther Vidal (ed.), *Proc. 9th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, May 2015. Lima, Peru. CEUR Publications. CEUR Workshop Proceedings.
3. Ricardo Mora, Claudio Gutierrez. Random-Walk Closeness Centrality Satisfies Boldi-Vigna Axioms. In Andrea Cali, Maria-Esther Vidal (ed.), *Proc. 9th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, May 2015. Lima, Peru. CEUR Publications. CEUR Workshop Proceedings.

Year 2016

1. Claudio Gutierrez, Daniel Hernández, Aidan Hogan, Axel Polleres. Certain Answers for SPARQL?. In Reinhard Pichler, Altigran Soares da Silva (ed.), *Proc. 10th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, pp. article 13, May 2016. Panama City, Panama. CEUR Publications. CEUR Workshop Proceedings.
2. Valeria Fionda, Claudio Gutierrez, Giuseppe Pirro. Building Knowledge Maps of Web Graphs. *Artificial Intelligence (AI)* 239:143-167, 2016. Elsevier Science, Amsterdam, The Netherlands.
3. Renzo Angles, Claudio Gutierrez. The Multiset Semantics of SPARQL Patterns. In *Proc. 15th International Semantic Web Conference (ISWC)*, pp. 20-36, Oct 2016. Kobe, Japan.
4. Renzo Angles, Claudio Gutierrez. Negation in SPARQL. In Reinhard Pichler, Altigran Soares da Silva (ed.), *Proc. 10th Alberto Mendelzon International Workshop on Foundations of Data Management (AMW)*, May 2016. Panama City, Panama. CEUR Publications. CEUR Workshop Proceedings.

Year 2018

1. Renzo Angles, Marcelo Arenas, Pablo Barceló, Peter Boncz, George Fletcher, Claudio Gutierrez, Tobias Lindaaker, Marcus Paradies, Stefan Plantikow, Juan Sequeda, Oskar van Rest, Hannes Voigt. G-CORE: A Core for Future Graph Query Languages. In *Proc. SIGMOD International Conference on Management of Data (SIGMOD)*, pp. 1421-1432, 2018. Houston, USA. ACM Press, New York, NY, USA.
2. Javier Fernández, Miguel Martínez-Prieto, Pablo de la Fuente, Claudio Gutierrez. Characterising RDF Data Sets. *Journal of Information Science (JIS)* 44(2):203-229, 2018. ISSN 0165-5515.
3. Daniel Hernández, Claudio Gutierrez, Aidan Hogan. Certain Answers for SPARQL with Blank Nodes. In *Proc. 17th International Semantic Web Conference (ISWC)*, pp. 337-353, Oct 2018. Monterey, CA, USA. ISBN 978-3-030-00667-9.

Year 2020

1. Leandro de Brasi, Claudio Gutierrez. Anonymity and Asynchronicity as Key Design Dimensions for the Reciprocity of Online Democratic Deliberation. *International Journal of Applied Philosophy* 34(2):183-200, 2020. ISSN 0739-098X.

Year 2021

1. Aidan Hogan, Eva Blomqvist, Michael Cochez, Claudia d'Amato, Gerard de Melo, Claudio Gutierrez, Sabrina Kirrane, José Emilio Labra Gayo, Roberto Navigli, Sebastian Neumaier, Axel-Cyrille Ngonga Ngomo, Axel Polleres, Sabbir M. Rashid, Anisa Rula, Lukas

Schmelzeisen, Juan F. Sequeda, Steffen Staab, Antoine Zimmermann. Knowledge Graphs. *ACM Computing Surveys (CSUR)* 54(4):1-37, Jul 2021. ACM Press, New York, NY, USA. ISSN 0360-0300.

2. Aidan Hogan, Eva Blomqvist, Michael Cochez, Claudia d’Amato, Gerard de Melo, Claudio Gutierrez, Sabrina Kirrane, José Emilio Labra Gayo, Roberto Navigli, Sebastian Neumaier, Axel-Cyrille Ngonga Ngomo, Axel Polleres, Sabbir M. Rashid, Anisa Rula, Lukas Schmelzeisen, Juan F. Sequeda, Steffen Staab, Antoine Zimmermann. *Knowledge Graphs*. 257 pages, Nov 2021. Morgan & Claypool Publishers, San Francisco, CA, USA. ISBN 9781636392356. Data, Semantics, and Knowledge vol. 22.
3. Marcelo Arenas, Claudio Gutierrez, Juan Sequeda. Querying in the Age of Graph Databases and Knowledge Graphs. In *Proc. SIGMOD International Conference on Management of Data (SIGMOD)*, pp. 2821-2828, 2021. Xian, China. ACM Press, New York, NY, USA.
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Year 2022

1. Juan Alvarez, Claudio Gutierrez. Cultural, Scientific and Technical Antecedents of the Cybersyn Project in Chile. *AI & SOCIETY*, 2022. Springer Nature Switzerland AG, Cham, Switzerland. ISSN 0951-5666.

Year 2025

1. Wenjia Ye, Matías Toro, Claudio Gutierrez, Bruno C. d. S. Oliveira, Éric Tanter. Elucidating Type Conversions in SQL Engines. In *Proc. 34th European Symposium on Programming (ESOP)*, pp. 408-435, 2025. Springer Nature Switzerland AG, Cham, Switzerland.
2. Wenjia Ye, Matías Toro, Tomás Diaz, Bruno C. d. S. Oliveira, Manuel Rigger, Claudio Gutierrez, Domagoj Vrgoc. Flexible and Expressive Typed Path Patterns for GQL. *Proceedings of the ACM Programming Languages (PACMPL)* 9(OOPSLA):302-328, Oct 2025. ACM Press, New York, NY, USA. ISSN 2475-1421.