# **List of Publications**

# Dr. Uwe EGLY

#### **Edited Proceedings**

- [1] Olaf Beyersdorff, Nadia Creignou, Uwe Egly, and Heribert Vollmer. SAT and interactions (Dagstuhl Seminar 16381). *Dagstuhl Reports*, 6(9):74–93, 2016.
- [2] Carsten Sinz and Uwe Egly, editors. Theory and Applications of Satisfiability Testing SAT 2014 - 17th International Conference, Held as Part of the Vienna Summer of Logic, VSL 2014, Vienna, Austria, July 14-17, 2014. Proceedings, volume 8561 of Lecture Notes in Computer Science. Springer, 2014.
- [3] Alexander Reiterer, Uwe Egly, Michael Heinert, and Björn Riedel, editors. *Second International Workshop on Applications of Artificial Intelligence in Engineering Geodesy (AIEG)*, Braunschweig, Germany, June 2010.
- [4] Alexander Reiterer and Uwe Egly, editors. *First International Workshop on Applications of Artificial Intelligence in Engineering Geodesy (AIEG)*, Vienna, Austria, December 2008.
- [5] Uwe Egly and Christian G. Fermüller, editors. Automated Reasoning with Analytic Tableaux and Related Methods, International Conference, TABLEAUX 2002, Copenhagen, Denmark, July 30 - August 1, 2002, Proceedings, volume 2381 of Lecture Notes in Computer Science. Springer, 2002.

## **Contributions to Books and Handbooks**

- Matthias Baaz, Uwe Egly, and Alexander Leitsch. Normal form transformations. In John Alan Robinson and Andrei Voronkov, editors, *Handbook of Automated Reasoning*, pages 273–333. Elsevier and MIT Press, 2001.
- [2] Uwe Egly and Hans Tompits. Some strengths of nonmonotonic reasoning. In Steffen Hölldobler, editor, *Intellectics and Computational Logic*, volume 19 of *Applied Logic Series*, pages 125–141. Kluwer, 2000.
- [3] Matthias Baaz, Uwe Egly, and Alexander Leitsch. Extension Methods in Automated Deduction. In W. Bibel and P. Schmitt, editors, *Automated Deduction — A Basis for Applications*, volume II, part 4, chapter 12, pages 331–360. Kluwer Academic Press, 1998.
- [4] Uwe Egly. Cuts in Tableaux. In W. Bibel and P. Schmitt, editors, Automated Deduction A Basis for Applications, volume I, part 1, chapter 4, pages 103–132. Kluwer Academic Press, 1998.

#### **Publications in Journals**

- [1] Uwe Egly, Martin Kronegger, Florian Lonsing, and Andreas Pfandler. Conformant planning as a case study of incremental QBF solving. *Ann. Math. Artif. Intell.*, 80(1):21–45, 2017.
- [2] Nadia Creignou, Hervé Daudé, Uwe Egly, and Raphaël Rossignol. Exact location of the phase transition for random (1, 2)-QSAT. *RAIRO Theor. Inf. and Applic.*, 49(1):23–45, 2015.
- [3] Nadia Creignou, Uwe Egly, and Johannes Schmidt. Complexity classifications for logic-based argumentation. *ACM Trans. Comput. Log.*, 15(3):19, 2014.
- [4] Alexander Reiterer, Uwe Egly, Tanja Vicovac, Enrico Mai, Shahram Moafipoor, Dorota A. Grejner-Brzezinska, and Charles K. Toth. Application of artificial intelligence in geodesy–A review of theoretical foundations and practical examples. *Journal of Applied Geodesy*, 4(4):201– 217, 2010.
- [5] Uwe Egly, Sarah A. Gaggl, and Stefan Woltran. Answer-set programming encodings for argumentation frameworks. *Argumentation and Computation*, 1(2):147–177, 2010.
- [6] Uwe Egly and Leopold Haller. A SAT solver for circuits based on the tableau method. *KI*, 24(1):15–23, 2010.
- [7] Uwe Egly, Martina Seidl, and Stefan Woltran. A solver for QBFs in negation normal form. *Constraints*, 14(1):38–79, 2009.
- [8] A. Reiterer, M. Lehmann, M. Miljanovic, H. Ali, G. Paar, U. Egly, T. Eiter, and H. Kahmen. A 3D optical deformation measurement system supported by knowledge-based and learning techniques. *Journal of Applied Geodesy*, 3(1):1–13, 2009.
- [9] Alexander Reiterer, Uwe Egly, Thomas Eiter, and Heribert Kahmen. A knowledge-based videotheodolite measurement system for object representation/monitoring. *Advances in Engineering Software*, 39(10):821–827, 2008.
- [10] A. Reiterer, M. Lehmann, M. Miljanovic, H. Ali, G. Paar, U. Egly, T. Eiter, and H. Kahmen. Ein bildgestütztes 3D Deformationsmesssystem (An image-based 3D deformation measurement system) (poster). *Journal of Alpine Geology, Pangeo 2008", Mitt. Ges. Geol. Bergbaustud. sterr.*, 49:87, 2008. ISSN: 1563-0846.
- [11] Nadia Creignou, Hervé Daudé, and Uwe Egly. Phase transition for random quantified XOR-formulas. J. Artif. Intell. Res. (JAIR), 29:1–18, 2007.
- [12] Uwe Egly, Reinhard Pichler, and Stefan Woltran. On deciding subsumption problems. *Ann. Math. Artif. Intell.*, 43(1):255–294, 2005.
- [13] Uwe Egly, Bernhard Schieman, and Josef Schneeberger. Technical documentation authoring based on semantic web methods. *KI*, 19(2):56–59, 2005.
- [14] Alexander Reiterer, Heribert Kahmen, Uwe Egly, and Thomas Eiter. Wissensbasierte Bildaufbereitung für ein videotheodolit-basiertes Multisensorsystem. *Allgemeine Vermessungs-Nachrichten (AVN)*, 111:202–208, 2004. (In German).

- [15] Klaus Chmelina, Heribert Kahmen, Thomas Eiter, and Uwe Egly. Heuristische Echtzeit-Fehlererkennung bei Deformationsmessungen während des Tunnelvortriebs. Zeitschrift für Vermessungswesen (ZfV), 128(5):333–340, 2003. (In German).
- [16] Uwe Egly and Hans Tompits. On different proof-search strategies for orthologic. *Studia Logica*, 73(1):131–152, 2003.
- [17] Alexander Reiterer, Heribert Kahmen, Uwe Egly, and Thomas Eiter. 3D-Vermessung mit Videotheodoliten und automatisierte Zielpunkterfassung mit Hilfe von Interest-Operatoren. *All-gemeine Vermessungs-Nachrichten (AVN)*, 110:150–156, 2003. (In German).
- [18] Uwe Egly and Hans Tompits. Proof-complexity results for nonmonotonic reasoning. ACM Trans. Comput. Log., 2(3):340–387, 2001.
- [19] Uwe Egly. On different intuitionistic calculi and embeddings from Int to S4. *Studia Logica*, 69(2):249–277, 2001.
- [20] Uwe Egly and Thomas Rath. Practically useful variants of definitional translations to normal form. *Inf. Comput.*, 162(1-2):255–264, 2000.
- [21] Uwe Egly and Stephan Schmitt. On intuitionistic proof transformations, their complexity, and application to constructive program synthesis. *Fundam. Inform.*, 39(1-2):59–83, 1999.
- [22] Uwe Egly. An answer to an open problem of Urquhart. *Theor. Comput. Sci.*, 198(1-2):201–209, 1998.
- [23] Uwe Egly and Stephan Schmitt. Intuitionistic proof transformations: Complexity and applications. *Electr. Notes Theor. Comput. Sci.*, 17, 1998.
- [24] Uwe Egly. On definitional transformations to normal form for institionistic logic. *Fundam*. *Inform.*, 29(1-2):165–201, 1997.
- [25] Uwe Egly. On different structure-preserving translations to normal form. J. Symb. Comput., 22(2):121–142, 1996.
- [26] U. Egly and T. Rath. The Halting Problem: An Automatically Generated Proof. *AAR Newsletter*, 30:10–16, 1995.

#### **Publications in Conferences and Symposia**

- [1] Florian Lonsing and Uwe Egly. QRAT+: generalizing QRAT by a more powerful QBF redundancy property. In Didier Galmiche, Stephan Schulz, and Roberto Sebastiani, editors, *Automated Reasoning - 9th International Joint Conference, IJCAR 2018, Held as Part of the Federated Logic Conference, FloC 2018, Oxford, UK, July 14-17, 2018, Proceedings*, volume 10900 of *Lecture Notes in Computer Science*, pages 161–177. Springer, 2018.
- [2] Florian Lonsing and Uwe Egly. Evaluating QBF solvers: Quantifier alternations matter. In John N. Hooker, editor, *Principles and Practice of Constraint Programming - 24th International Conference, CP 2018, Lille, France, August 27-31, 2018, Proceedings*, volume 11008 of *Lecture Notes in Computer Science*, pages 276–294. Springer, 2018.

- [3] Roderick Bloem, Nicolas Braud-Santoni, Vedad Hadzic, Uwe Egly, Florian Lonsing, and Martina Seidl. Expansion-based QBF solving without recursion. In *Formal Methods in Computer-Aided Design*, 2018, to appear.
- [4] Florian Lonsing and Uwe Egly. DepQBF 6.0: A search-based QBF solver beyond traditional QCDCL. In Leonardo de Moura, editor, Automated Deduction - CADE 26 - 26th International Conference on Automated Deduction, Gothenburg, Sweden, August 6-11, 2017, Proceedings, volume 10395 of Lecture Notes in Computer Science, pages 371–384. Springer, 2017.
- [5] Florian Lonsing, Uwe Egly, and Martina Seidl. Q-resolution with generalized axioms. In Theory and Applications of Satisfiability Testing - SAT 2016 - 19th International Conference, Bordeaux, France, July 5-8, 2016, Proceedings, pages 435–452, 2016.
- [6] Uwe Egly. On stronger calculi for QBFs. In *Theory and Applications of Satisfiability Testing* - SAT 2016 - 19th International Conference, Bordeaux, France, July 5-8, 2016, Proceedings, pages 419–434, 2016.
- [7] Uwe Egly, Florian Lonsing, and Johannes Oetsch. Automated benchmarking of incremental SAT and QBF solvers. In Logic for Programming, Artificial Intelligence, and Reasoning - 20th International Conference, LPAR-20 2015, Suva, Fiji, November 24-28, 2015, Proceedings, pages 178–186, 2015.
- [8] Florian Lonsing and Uwe Egly. Incrementally computing minimal unsatisfiable cores of QBFs via a clause group solver API. In Marijn Heule and Sean Weaver, editors, *Theory and Applications of Satisfiability Testing SAT 2015 18th International Conference, Austin, TX, USA, September 24-27, 2015, Proceedings*, volume 9340 of *Lecture Notes in Computer Science*, pages 191–198. Springer, 2015.
- [9] Florian Lonsing, Fahiem Bacchus, Armin Biere, Uwe Egly, and Martina Seidl. Enhancing search-based QBF solving by dynamic blocked clause elimination. In *Logic for Programming, Artificial Intelligence, and Reasoning - 20th International Conference, LPAR-20 2015, Suva, Fiji, November 24-28, 2015, Proceedings*, pages 418–433, 2015.
- [10] Uwe Egly, Martin Kronegger, Florian Lonsing, and Andreas Pfandler. Conformant planning as a case study of incremental QBF solving. In Gonzalo A. Aranda-Corral, Jacques Calmet, and Francisco J. Martín-Mateos, editors, *Artificial Intelligence and Symbolic Computation - 12th International Conference, AISC 2014, Seville, Spain, December 11-13, 2014. Proceedings*, volume 8884 of *Lecture Notes in Computer Science*, pages 120–131. Springer, 2014.
- [11] Roderick Bloem, Uwe Egly, Patrick Klampfl, Robert Könighofer, and Florian Lonsing. SATbased methods for circuit synthesis. In *Formal Methods in Computer-Aided Design, FMCAD* 2014, Lausanne, Switzerland, October 21-24, 2014, pages 31–34. IEEE, 2014.
- [12] Florian Lonsing and Uwe Egly. Incremental QBF solving. In Barry O'Sullivan, editor, Principles and Practice of Constraint Programming 20th International Conference, CP 2014, Lyon, France, September 8-12, 2014. Proceedings, volume 8656 of Lecture Notes in Computer Science, pages 514–530. Springer, 2014.
- [13] Florian Lonsing and Uwe Egly. Incremental QBF solving by DepQBF. In Hoon Hong and Chee Yap, editors, *ICMS*, volume 8592 of *Lecture Notes in Computer Science*, pages 307–314. Springer, 2014.

- [14] Uwe Egly, Florian Lonsing, and Magdalena Widl. Long-distance resolution: Proof generation and strategy extraction in search-based QBF solving. In Kenneth L. McMillan, Aart Middeldorp, and Andrei Voronkov, editors, *LPAR*, volume 8312 of *Lecture Notes in Computer Science*, pages 291–308. Springer, 2013.
- [15] Florian Lonsing, Uwe Egly, and Allen Van Gelder. Efficient clause learning for quantified boolean formulas via QBF pseudo unit propagation. In Matti Järvisalo and Allen Van Gelder, editors, SAT, volume 7962 of Lecture Notes in Computer Science, pages 100–115. Springer, 2013.
- [16] Magdalena Widl, Armin Biere, Petra Brosch, Uwe Egly, Marijn Heule, Gerti Kappel, Martina Seidl, and Hans Tompits. Guided merging of sequence diagrams. In Krzysztof Czarnecki and Görel Hedin, editors, *SLE*, volume 7745 of *Lecture Notes in Computer Science*, pages 164–183. Springer, 2012.
- [17] Nadia Creignou, Uwe Egly, and Johannes Schmidt. Complexity of logic-based argumentation in Schaefer's framework. In Bart Verheij, Stefan Szeider, and Stefan Woltran, editors, *COMMA*, volume 245 of *Frontiers in Artificial Intelligence and Applications*, pages 237–248. IOS Press, 2012.
- [18] Uwe Egly. On sequent systems and resolution for QBFs. In Alessandro Cimatti and Roberto Sebastiani, editors, SAT, volume 7317 of Lecture Notes in Computer Science, pages 100–113. Springer, 2012.
- [19] Petra Brosch, Uwe Egly, Sebastian Gabmeyer, Gerti Kappel, Martina Seidl, Hans Tompits, Magdalena Widl, and Manuel Wimmer. Towards scenario-based testing of UML diagrams. In *TAP*, pages 149–155, 2012.
- [20] Nadia Creignou, Uwe Egly, and Martina Seidl. A framework for the specification of random SAT and QSAT formulas. In *TAP*, pages 163–168, 2012.
- [21] Petra Brosch, Uwe Egly, Sebastian Gabmeyer, Gerti Kappel, Martina Seidl, Hans Tompits, Magdalena Widl, and Manuel Wimmer. Towards semantics-aware merge support in optimistic model versioning. In Jörg Kienzle, editor, *Models in Software Engineering - Workshops and Symposia at MODELS 2011, Wellington, New Zealand, October 16-21, 2011, Reports and Revised Selected Papers*, volume 7167 of *Lecture Notes in Computer Science*, pages 246–256. Springer, 2011.
- [22] Tanja Vicovac, Alexander Reiterer, Uwe Egly, Thomas Eiter, and Dirk Rieke-Zapp. Knowledge-based geo-risk assessment for an intelligent measurement system. In M. Bramer, editor, Artificial Intelligence in Theory and Practice III; IFIP Advances in Information and Communication Technology, pages 215–224. Springer, 2010.
- [23] N. Creignou, H. Daudé, U. Egly, and R. Rossignol. (1, 2)-QSAT: A good candidate for understanding phase transitions mechanisms. In O. Kullmann, editor, *Theory and Applications* of Satisfiability Testing - SAT 2009, 12th International Conference, SAT 2009, Swansea, UK, June 30 - July 3, 2009. Proceedings, volume 5584 of Lecture Notes in Computer Science, pages 363–376. Springer, 2009.

- [24] Tanja Vicovac, Alexander Reiterer, Uwe Egly, Thomas Eiter, and Dirk Rieke-Zapp. First development steps for an automated knowledge-based deformation interpretation system. In H. Kahmen A. Grün, editor, 9th Conference on Optical 3-D Measurement Techniques, pages 61–90, March 2009. ISBN: 978-3-9501492-5-8.
- [25] Nadia Creignou, Hervé Daudé, Uwe Egly, and Raphaël Rossignol. New results on the phase transition for random quantified boolean formulas. In Hans Kleine Büning and Xishun Zhao, editors, *Theory and Applications of Satisfiability Testing - SAT 2008, 11th International Conference, SAT 2008, Guangzhou, China, May 12-15, 2008. Proceedings*, volume 4996 of *Lecture Notes in Computer Science*, pages 34–47. Springer, 2008.
- [26] Uwe Egly, Sarah Alice Gaggl, and Stefan Woltran. Aspartix: Implementing argumentation frameworks using answer-set programming. In Maria Garcia de la Banda and Enrico Pontelli, editors, *Logic Programming, 24th International Conference, ICLP 2008, Udine, Italy, December 9-13 2008, Proceedings*, volume 5366 of *Lecture Notes in Computer Science*, pages 734–738. Springer, 2008.
- [27] A. Reiterer, M. Lehmann, M. Miljanovic, H. Ali, G. Paar, U. Egly, T. Eiter, and H. Kahmen. Deformation monitoring using a new kind of optical 3d measurement system: components and perspectives. In 13th FIG International Symposium on Deformation Measurements and Analysis; 4th IAG Symposium on Geodesy for Geotechnical and Structural Engineering, Lissabon, Portugal, December 2008. 10 pages.
- [28] Nadia Creignou, Hervé Daudé, and Uwe Egly. Phase transition for random quantified XORformulas. In *Proceedings of the Guangzhou Symposioum on Satisfiability in Logic-Based Modeling*, September 2006.
- [29] Uwe Egly, Martina Seidl, and Stefan Woltran. A solver for QBFs in nonprenex form: Overview and experimental results. In *Proceedings of the Guangzhou Symposioum on Satisfiability in Logic-Based Modeling*, September 2006. (Invited).
- [30] Uwe Egly, Martina Seidl, and Stefan Woltran. A solver for QBFs in nonprenex form. In Gerhard Brewka, Silvia Coradeschi, Anna Perini, and Paolo Traverso, editors, ECAI 2006, 17th European Conference on Artificial Intelligence, August 29 - September 1, 2006, Riva del Garda, Italy, Including Prestigious Applications of Intelligent Systems (PAIS 2006), Proceedings, volume 141 of Frontiers in Artificial Intelligence and Applications, pages 477–481. IOS Press, 2006.
- [31] Uwe Egly and Stefan Woltran. Reasoning in argumentation frameworks using quantified boolean formulas. In Paul E. Dunne and Trevor J. M. Bench-Capon, editors, *Computational Models of Argument: Proceedings of COMMA 2006, September 11-12, 2006, Liverpool, UK*, volume 144 of *Frontiers in Artificial Intelligence and Applications*, pages 133–144. IOS Press, 2006.
- [32] Alexander Reiterer, Uwe Egly, Thomas Eiter, and Heribert Kahmen. A knowledge based decision system for an image based measurement system. In B.H.V. Topping, editor, AICC, pages 35–36. Civil-Comp Press, 2005.
- [33] A. Reiterer, H. Kahmen, U. Egly, T. Eiter, and G. Paar. A smart videometric system. In A. Grün and H. Kahmen, editors, *Proceedings 8th Conference on Optical 3D Measurement Techniques*, pages 370–375, Vienna, 3-10 October, 2005. ISBN 3-9501492-2-8.

- [34] U. Egly, G. Novak, and D. Weber. Decision making for MiroSOT soccer playing robots. In *First CLAWAR/EURON/IARP Workshop on Robots in Entertainment, Leisure and Hobby*, pages 69–72, Vienna, Austria, April 2005.
- [35] Uwe Egly, Bernhard Schieman, and Josef Schneeberger. Technical documentation and semantic web based methods. In *Proceedings of the First IFIP Conference on Artificial Intelligence Application and Innovations (AIAI 2004)*, pages 214–228, 2004.
- [36] Alexander Reiterer, Uwe Egly, Thomas Eiter, and Heribert Kahmen. A knowledge-based videometric measurement system. In *Proceedings of the First IFIP Conference on Artificial Intelligence Application and Innovations (AIAI 2004)*, pages 313–322, 2004.
- [37] Uwe Egly, Martina Seidl, Hans Tompits, Stefan Woltran, and Michael Zolda. Comparing different prenexing strategies for quantified boolean formulas. In Enrico Giunchiglia and Armando Tacchella, editors, *Theory and Applications of Satisfiability Testing, 6th International Conference, SAT 2003. Santa Margherita Ligure, Italy, May 5-8, 2003 Selected Revised Papers*, volume 2919 of *Lecture Notes in Computer Science*, pages 214–228. Springer, 2003.
- [38] Alexander Reiterer, Heribert Kahmen, Uwe Egly, and Thomas Eiter. Knowledge-based image preprocessing for a theodolit measurement system. In A. Grün and H. Kahmen, editors, *Proceedings of the 6th Conference on Optical 3D Measurement Techniques (DMT03)*, pages 183–190, 2003.
- [39] Uwe Egly. Embedding lax logic into intuitionistic logic. In Andrei Voronkov, editor, Automated Deduction - CADE-18, 18th International Conference on Automated Deduction, Copenhagen, Denmark, July 27-30, 2002, Proceedings, volume 2392 of Lecture Notes in Computer Science, pages 78–93. Springer, 2002.
- [40] Uwe Egly, Thomas Eiter, Volker Klotz, Hans Tompits, and Stefan Woltran. Computing stable models with quantified boolean formulas: Some experimental results. In Alessandro Provetti and Tran Cao Son, editors, Answer Set Programming, Towards Efficient and Scalable Knowledge Representation and Reasoning, Proceedings of the 1st Intl. ASP'01 Workshop, Stanford, CA, USA, March 26-28, 2001, 2001.
- [41] Uwe Egly and Stephan Schmitt. Deriving modular programs from short proofs. In Rajeev Goré, Alexander Leitsch, and Tobias Nipkow, editors, Automated Reasoning, First International Joint Conference, IJCAR 2001, Siena, Italy, June 18-23, 2001, Proceedings, volume 2083 of Lecture Notes in Computer Science, pages 561–577. Springer, 2001.
- [42] Uwe Egly. Properties of embeddings from Int to S4. In Roy Dyckhoff, editor, Automated Reasoning with Analytic Tableaux and Related Methods, International Conference, TABLEAUX 2000, St Andrews, Scotland, UK, July 3-7, 2000, Proceedings, volume 1847 of Lecture Notes in Computer Science, pages 205–219. Springer, 2000.
- [43] Uwe Egly, Thomas Eiter, Hans Tompits, and Stefan Woltran. Solving advanced reasoning tasks using quantified boolean formulas. In Proceedings of the Seventeenth National Conference on Artificial Intelligence and Twelfth Conference on on Innovative Applications of Artificial Intelligence, July 30 - August 3, 2000, Austin, Texas, USA, pages 417–422. AAAI Press / The MIT Press, 2000.

- [44] Uwe Egly, Thomas Eiter, Volker Klotz, Hans Tompits, and Stefan Woltran. Experimental evaluation of the disjunctive logic programming module of the system quip. In *15. WLP*, pages 113–122, 2000.
- [45] Uwe Egly, Thomas Eiter, Hans Tompits, and Stefan Woltran. Implementing default reasoning using quantified boolean formulae. In WLP, pages 223–228, 2000.
- [46] Uwe Egly, Michael Fink, Axel Polleres, and Hans Tompits. A web-based tutoring tool for calculating default logic extensions. In *WebNet*, pages 1251–1252, 1999.
- [47] Uwe Egly and Hans Tompits. A sequent calculus for intuitionistic default logic. In *WLP*, 1997. Online Proceedings: http://www.pms.ifi.lmu.de/publikationen/PMS-FB/PMS-FB-1997-10/.
- [48] Uwe Egly. Quantifers and the system KE: Some surprising results. In Georg Gottlob, Etienne Grandjean, and Katrin Seyr, editors, *CSL*, volume 1584 of *Lecture Notes in Computer Science*, pages 90–104. Springer, 1998.
- [49] Uwe Egly and Gernot Koller. JQuest: ein javabasiertes designtool für elektronische Fragebogen im Internet. In Manfred Sommer, Werner Remmele, and Konrad Klöckner, editors, Interaktion im Web - Innovative Kommunikationsformen, Fachtagung und Kongreβ des German Chapter of the ACM, der Gesellschaft für Informatik (GI) sowie Fachbereich Mathematik und Informatik der Philipps-Universität Marburg/Lahn am 12. und 13. Mai 1998 in Marburn/Lahn, volume 50 of Berichte des German Chapter of the ACM, pages 33–43. Teubner, 1998.
- [50] Uwe Egly and Stephan Schmitt. Intuitionistic proof transformations and their application to constructive program synthesis. In Jacques Calmet and Jan A. Plaza, editors, Artificial Intelligence and Symbolic Computation, International Conference AISC'98, Plattsburgh, New York, USA, September 16-18, 1998, Proceedings, volume 1476 of Lecture Notes in Computer Science, pages 132–144. Springer, 1998.
- [51] Uwe Egly and Hans Tompits. On proof complexity of circumscription. In Harrie C. M. de Swart, editor, Automated Reasoning with Analytic Tableaux and Related Methods, International Conference, TABLEAUX '98, Oisterwijk, The Netherlands, May 5-8, 1998, Proceedings, volume 1397 of Lecture Notes in Computer Science, pages 141–155. Springer, 1998.
- [52] Matthias Baaz, Uwe Egly, and Christian G. Fermüller. Lean induction principles for tableaux. In Didier Galmiche, editor, Automated Reasoning with Analytic Tableaux and Related Methods, International Conference, TABLEAUX '97, Pont-à-Mousson, France, May 13-16, 1997, Proceedings, volume 1227 of Lecture Notes in Computer Science, pages 62–75. Springer, 1997.
- [53] Uwe Egly. Some pitfalls of LK-to-LJ translations and how to avoid them. In William Mc-Cune, editor, Automated Deduction - CADE-14, 14th International Conference on Automated Deduction, Townsville, North Queensland, Australia, July 13-17, 1997, Proceedings, volume 1249 of Lecture Notes in Computer Science, pages 116–130. Springer, 1997.
- [54] Uwe Egly. Non-elementary speed-ups in proof length by different variants of classical analytic calculi. In Didier Galmiche, editor, *Automated Reasoning with Analytic Tableaux and Related Methods, International Conference, TABLEAUX '97, Pont-à-Mousson, France, May*

13-16, 1997, Proceedings, volume 1227 of Lecture Notes in Computer Science, pages 158–172. Springer, 1997.

- [55] Uwe Egly and Karin Genther. Structuring of computer-generated proofs by cut introduction. In Georg Gottlob, Alexander Leitsch, and Daniele Mundici, editors, *Computational Logic and Proof Theory, 5th Kurt Gödel Colloquium, KGC'97, Vienna, Austria, August 25-29, 1997, Proceedings*, volume 1289 of *Lecture Notes in Computer Science*, pages 140–152. Springer, 1997.
- [56] Uwe Egly and Hans Tompits. Non-elementary speed-ups in default reasoning. In Dov M. Gabbay, Rudolf Kruse, Andreas Nonnengart, and Hans Jürgen Ohlbach, editors, *Qualitative and Quantitative Practical Reasoning, First International Joint Conference on Qualitative and Quantitative Practical Reasoning ECSQARU-FAPR'97, Bad Honnef, Germany, June 9-12, 1997, Proceedings*, volume 1244 of *Lecture Notes in Computer Science*, pages 237–251. Springer, 1997.
- [57] Uwe Egly and Hans Tompits. Is non-monotonic reasoning always harder? In Jürgen Dix, Ulrich Furbach, and Anil Nerode, editors, Logic Programming and Nonmonotonic Reasoning, 4th International Conference, LPNMR'97, Dagstuhl Castle, Germany, July 28-31, 1997, Proceedings, volume 1265 of Lecture Notes in Computer Science, pages 60–75. Springer, 1997.
- [58] Uwe Egly and Thomas Rath. On the practical value of different definitional translations to normal form. In Michael A. McRobbie and John K. Slaney, editors, Automated Deduction -CADE-13, 13th International Conference on Automated Deduction, New Brunswick, NJ, USA, July 30 - August 3, 1996, Proceedings, volume 1104 of Lecture Notes in Computer Science, pages 403–417. Springer, 1996.
- [59] Wolfgang Bibel, Stefan Brüning, Uwe Egly, Daniel S. Korn, and Thomas Rath. Issues in theorem proving based on the connection method. In Peter Baumgartner, Reiner Hähnle, and Joachim Posegga, editors, *Theorem Proving with Analytic Tableaux and Related Methods, 4th International Workshop, TABLEAUX '95, Schloß Rheinfels, St. Goar, Germany, May 7-10, 1995, Proceedings*, volume 918 of *Lecture Notes in Computer Science*, pages 1–16. Springer, 1995.
- [60] Uwe Egly. Super-polynomial speed-ups in proof length by new tautologies. In Carlos A. Pinto-Ferreira and Nuno J. Mamede, editors, *Progress in Artificial Intelligence, 7th Portuguese Conference on Artificial Intelligence, EPIA '95, Funchal, Madeira Island, Portugal, October* 3-6, 1995, Proceedings, volume 990 of Lecture Notes in Computer Science, pages 29–40. Springer, 1995.
- [61] Wolfgang Bibel, Stefan Brüning, Uwe Egly, and Thomas Rath. Towards an Adequate Theorem Prover Based on the Connection Method. In *Proceedings of the Sixth International Conference* on Artificial Intelligence and Information-Control of Robots, pages 137–148. World Scientific Publishing Company, 1994.
- [62] Wolfgang Bibel, Stefan Brüning, Uwe Egly, and Thomas Rath. Komet. In Alan Bundy, editor, Automated Deduction - CADE-12, 12th International Conference on Automated Deduction, Nancy, France, June 26 - July 1, 1994, Proceedings, volume 814 of Lecture Notes in Computer Science, pages 783–787. Springer, 1994.

- [63] Uwe Egly. On the value of antiprenexing. In Frank Pfenning, editor, Logic Programming and Automated Reasoning, 5th International Conference, LPAR'94, Kiev, Ukraine, July 16-22, 1994, Proceedings, volume 822 of Lecture Notes in Computer Science, pages 69–83. Springer, 1994.
- [64] Uwe Egly. On different concepts of function introduction. In Georg Gottlob, Alexander Leitsch, and Daniele Mundici, editors, *Computational Logic and Proof Theory, Third Kurt Gödel Colloquium, KGC'93, Brno, Czech Republic, August 24-27, 1993, Proceedings*, volume 713 of *Lecture Notes in Computer Science*, pages 172–183. Springer, 1993.
- [65] Uwe Egly. A first order resolution calculus with symmetries. In Andrei Voronkov, editor, Logic Programming and Automated Reasoning,4th International Conference, LPAR'93, St. Petersburg, Russia, July 13-20, 1993, Proceedings, volume 698 of Lecture Notes in Computer Science, pages 110–121. Springer, 1993.
- [66] Uwe Egly. A simple proof for the pigeonhole formulae. In Bernd Neumann, editor, 10th European Conference on Artificial Intelligence, ECAI 92, Vienna, Austria, August 3-7, pages 70–71. John Wiley and Sons, 1992.
- [67] Uwe Egly. Shortening proofs by quantifier introduction. In Andrei Voronkov, editor, Logic Programming and Automated Reasoning, International Conference LPAR'92, St. Petersburg, Russia, July 15-20, 1992, Proceedings, volume 624 of Lecture Notes in Computer Science, pages 148–159. Springer, 1992.
- [68] Uwe Egly. A generalized factorization rule based on the introduction of skolem terms. In Hermann Kaindl, editor, *Proc. 7th Austrian Conference on Artificial Intelligence, ÖGAI-91, Wien,* 24.-27. September 1991, volume 287 of *Informatik-Fachberichte*, pages 116–125. Springer, 1991.

## **Other Publications**

- [1] Nadia Creignou, Hervé Daudé, Uwe Egly, and Raphael Rossignol. The threshold for random (1,2)-QSAT. *CoRR*, abs/0907.0937, 2009. Submitted.
- [2] Uwe Egly, Sarah A. Gaggl, and Stefan Woltran. Answer-set programming encodings for argumentation frameworks. In W. Faber and J. Lee, editors, *Proceedings of the 1st International Workshop on Answer Set Programming and Other Computing Paradigms (ASPOCP)*, pages 1–15, 2008.
- [3] Alexander Reiterer, A. Bauer, and Uwe Egly. Deformation monitoring by image assisted total stations—state of the art and future developments. Technologieforum Leica Geosystems, Heerbrugg, Schweiz, 2008. Poster (invited presentation).
- [4] Uwe Egly. Reconstructing DPLL in sequent calculi. In *Collegium Logicum* 2007: *Proofs and Structures*, Vienna, Austria, October 2007. (Informal abstracts at http://www.logic.at/CL2007).
- [5] U. Egly, A. Fiedler, H. Horacek, and S. Schmidt, editors. Proceedings of the IJCAR 2001 Workshop on Proof Transformation, Proof Presentation and Complexity of Proofs, 2001. Universita degli Studi di Siena, via Roma 56, 53100 Siena, Italy.

- [6] Uwe Egly, Rainer Feldmann, and Hans Tompits, editors. Proceedings of the IJCAR 2001 Workshop on Theory and Applications of Quantified Boolean Formulas, 2001. Technical Report DII 12/01, Dipartimento di Ingegneria dell'Informazione, Universita degli Studi di Siena, via Roma 56, 53100 Siena, Italy.
- [7] Uwe Egly. On Methods of Function Introduction and Related Concepts. PhD thesis, TH Darmstadt, 1994.
- [8] Uwe Egly. Problem-Reduction Methods and Clause Splitting in Automated Theorem Proving. Master's thesis, Technische Universität Wien, A–1040 Wien, 1990.
- [9] Uwe Egly. Objektorientiertes Windowhandling und Schlußfolgern in INTERLISP/LOOPS. Master's thesis, Universität Heidelberg, Studiengang Medizinische Informatik, 1987.