TRACK RECORD

I have contributed to the theory and practice of higher-order automated and interactive reasoning, I have pioneered the practical automation of various first- and higher-order non-classical logics, and I have been successfully bridging between AI, Computer Science, Philosophy and Mathematics, which is reflected also in numerous invited talks at prestigious events in all those disciplines.

Higher-Order (HO) Automated Theorem Proving (ATP)

Contrasting Peter Andrews' mating-based proof search in his seminal TPS prover and significantly extending Gerard Huet's theoretical work on HO-resolution and -unification, my **Leo theorem provers** (LEO-I@Saarland University, LEO-II@Cambridge University/FU Berlin and Leo-III@FU Berlin) have **pioneered the area of resolution-based HO theorem proving for Henkin semantics**. Moreover, I was the PI of an FP7/2007-2013 project (PIIF-GA-2008-219982) which **initiated the development of the successful international (TPTP) infrastructure for the automation of HO logic**. Regarding theory, I have made significant contributions to the **semantics and proof theory (cut-free calculi, cut-simulation) in classical HO logic**. In the context of the Leo projects and the prior OMEGA project at Saarland university, I have made pioneering contributions also to **cooperative HO–FO–SAT theorem proving**, **term-sharing and term-indexing in HO ATP**, **agent-based prover architectures**, **the integration of interactive theorem proving (ITP) and ATP**, **proof planning with ATPs** and **user interfaces for proof assistants**.

• *Main papers:* [41, 47, 90, 97, 114, 119, 28, 44, 45, 46, 30, 80, 86, 102, 106, 113, 116, 105, 109]

Expressive Knowledge Representation and Reasoning

Since 2008, I have additionally contributed to the **pioneering of ATP (and ITP) in expressive, quantified non-classical logics (QNCLs)**. My particular focus has been on highly relevant QNCLs for which none or very few practical systems existed so far. By **extending the translational approach (which is well known e.g. for propositional modal logics) to additionally support quantifiers and other binders** and by **semantically embedding/encoding this translational approach as an equational theory in existing ITPs and ATPs for HO logic**, I have **shown how the latter systems can be turned into flexible, reusable reasoning systems for challenging QNCLs**. Regarding theory, I have demonstrated how this approach supports the **reduction of cut-elimination for even very challenging QNCLs to the existence of faithful, shallow semantical embeddings in classical HO logic with Henkin semantics**. However, I have also pointed to the **subtle issue of cut-simulation in HO logic**, which may render cut-elimination a pointless criterion.

• *Main papers:* [1, 75, 59, 76, 84, 10, 14, 23, 38, 60, 53, 70, 54, 94, 107, 123, 126]

Computational Metaphysics & Formal Ontology

To exemplarily demonstrate the practical use of the combination of the above contributions, **I have analysed (in collaboration with B. Woltzenlogel Paleo) various modern variants of the ontological argument for (or against) the existence of God on the computer**. This work, which has attracted major attention in the public media and in academia, has significantly contributed to the **pioneering of the new area of computational metaphysics**. I have demonstrated that ATPs may even contribute new knowledge to metaphysics. For example, **my theorem prover LEO-II detected a previously unknown inconsistency in Gödel's original variant of the ontological argument**. These activities have led to the set-up of a **new interdisciplinary lecture course on Computational Metaphysics, which received the 2015/16 central teaching award of FU Berlin**. A former student of this course, Daniel Kirchner, has meanwhile adapted the semantical embedding approach to achieve an **encoding Ed Zalta' entire Principia-logico Metaphysica on the computer.** In the context of this experimental work, he **revealed a deeply rooted paradox in Zalta's foundational theory**. Prior to the work in Computational Metaphysics, I have **employed similar techniques to reveal flaws in the SUMO upper ontology**, and in a collaboration with Dana Scott I have **found issues a textbook on category theory**.

• *Main papers:* [4, 18, 48, 19, 5, 71, 76, 67, 13, 7, 17, 26, 39]

SELECTED PUBLICATIONS; see here for more)

Journals (the first 5 have SJR rating Q1, the last one has more citations though)

• C. Benzmüller, Cut-Elimination for Quantified Conditional Logic. Journal of Philosophical Logic, (2017) 46(3):333-353.

• C. Benzmüller, N. Sultana, F. Theiss and L. Paulson, The Higher-Order Prover Leo-II. Journal of Automated Reasoning, (2015) 55(4):389-404.

• C. Benzmüller, A. Pease. Higher-order aspects and context in SUMO. Journal of Web Semantics, (2012) 12-13:104-117.
• C. Benzmüller and L.C. Paulson, Multimodal and Intuitionistic Logics in Simple Type Theory. The Logic Journal of the IGPL, (2010) 18(6):881-892.
• C. Benzmüller, C. E. Brown, and M. Kohlhase, Cut-Simulation and Impredicativity. Logical Methods in Computer Science, (2009) 5(1:6):1-21.
• C. Benzmüller and L.C. Paulson, Quantified Multimodal Logics in Simple Type Theory. Logica Universalis, (2013) 7(1):7-20.

Conferences (with less than 28 % acceptance rates)

• C. Benzmüller and B. Woltzenlogel Paleo, The Inconsistency in Gödels Ontological Argument: A Success Story for AI in Metaphysics. IJCAI, 2016.
• C. Benzmüller and B. Woltzenlogel Paleo, Automating Gödels Ontological Proof of God's Existence with Higher-order Automated Theorem Provers. ECAI, 2014.
• C. Benzmüller, Automating Quantified Conditional Logics in HOL. IJCAI, 2013.

Handbook Chapters

• C. Benzmüller and D. Miller, Automation of Higher-Order Logic. Handbook of the History of Logic, Vol. 9 – Computational Logic, North Holland, Elsevier, pp. 215-254, 2014.

GOOGLE SCHOLAR (Sep 5, 2017): Citations: 2793 h-index: 27 i10-index: 78

SYSTEM DEVELOPENT (selection)

• Powerful conference management tool for CADE-25 at FU Berlin	2015
• Leo-III/LeoPARD: agent-based infrastructure and automated theorem prover for HOL	2014–
• LEO-II: automated theorem prover for HOL, integrated with Isabelle/HOL	2007–2014
• DIALOG: demonstrator system on tutorial NL dialogs about proofs, integrated with OMEGA	2000–2008
• LEO: automated theorem prover for HOL, integrated with OMEGA	1997–2005
• OANTS: agent-oriented reasoning system, integration platform for OMEGA	1997–2006
• OMEGA: AI-based interactive proof assistant & automated proof planner, NL techniques	1992–2006

INVITED PRESENTATIONS (small, recent selection)

Public: • URANIA, Berlin (2017) • Bundeszentrale für politische Bildung, Berlin (2017) **Keynotes at Scientific Events:** • HaPoC celebration event for Martin Davis' 90st birthday (2018) • Brazilian Symposium on Formal Methods (2017) • 3. BMG Tag, Berliner Mathematische Gesellschaft (2017) • Intl. Colloquium of the Berlin Mathematical School (2016) • The Global, Cross-Sector Conf. on Technology Supported Learning and Training, Berlin (2016) • Shared Services & Outsourcing Woche, Berlin (2016) • All India Students Conference on Science and Spiritual Quest, Kharagpur, IN (2016) • TABLEAUX Conference, Wroclaw, PL (2015) • World Congress on Logic and Religion, Joao Pessoa, BR (2015) **Universities:** • ILIAS Distinguished Lectures, University of Luxemburg, LU (2017) • Mathematical Logic Seminar, Stanford University, US (2016) • Logic Colloquium, UC Berkeley, US (2016) • SRI International, Menlo Park, US (2015) • Computational Logic Seminar, Stanford University, US (2015) • Institute of CS, University of Innsbruck, AT (2014) • Collegium Logicum, Kurt Gödel Society, Vienna, AT (2012)

MY WORK IN THE MEDIA (small, recent selection)

Television: • 3sat, scobel, Die Roboter-Rivalen (2016) • National Geographic Television, Germany Premiere of Morgan Freemans Story of God (2016) • 3sat, D wie Deus ex Machina (2016) **Interviews in Magazines:** • Hohe Luft – Zeitschrift für Philosophie, DE (2016) • Albert, Journal der Einstein Stiftung Berlin, DE (2015) • PC Zoznam, CZ (2014) • Marabilias, ES (2013) • Motherboard, DE (2013) **Radio Interviews:** • Deutschlandfunk, Robotorethik, DE (2017): • ORF, AT (2017,2013) • Die Evangelische Funkagentur, DE (2017) • detektor.fm, DE (2013) **Newspapers:** • Tagesspiegel, DE (2016) • Spiegel Online, DE (2015) • Zeit Magazin & Zeit Online, DE (2014) • Focus, DE (2014) • Die Welt, DE (2013) • Berliner Zeitung & Berliner Morgenpost, DE (2013) • La Republicca, IT (2013) • abc News, US (2013) • HNGN, US (2013) • Delhi Daily News, IN (2013) • Wiener Zeitung, AT (2013) • Spiegel Online & Spiegel Online International, DE (2013)

FULL PUBLICATION LIST

[1] Christoph Benzmüller. "Cut-Elimination for Quantified Conditional Logic". In: *Journal of Philosophical Logic* 46.3 (2017), pp. 333–353. DOI: 10.1007/s10992-016-9403-0. URL: http://christoph-benzmueller.de/papers/J31.pdf.

[2] Christoph Benzmüller. "Universal Reasoning, Rational Argumentation and Human-Machine Interaction". In: *arXiv, http://arxiv.org/abs/1703.09620* (2017). URL: http://arxiv.org/abs/1703.09620.

[3] Christoph Benzmüller, Alexander Steen, and Max Wisniewski. "Leo-III Version 1.1 (System description)". In: *IWIL@LPAR 2017 Workshop and LPAR-21 Short Presentations, Maun, Botswana, May 7-12, 2017*. Ed. by Thomas Eiter et al. Vol. 1. Kalpa Publications in Computing. Maun, Botswana: EasyChair, 2017. URL: http://www.easychair.org/publications/paper/342979.

[4] Christoph Benzmüller, Leon Weber, and Bruno Woltzenlogel Paleo. "Computer-Assisted Analysis of the Anderson-Hájek Controversy". In: *Logica Universalis* 11.1 (2017), pp. 139–151. DOI: 10.1007/s11787-017-0160-9. URL: http://christoph-benzmueller.de/papers/J32.pdf.

[5] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "Experiments in Computational Metaphysics: Gödel's Proof of God's Existence". In: *Savijnanam: scientific exploration for a spiritual paradigm. Journal of the Bhaktivedanta Institute* 9 (2017), pp. 43–57. ISSN: 0972-6586. URL: http://www.vedic-heritage.net/wp-content/uploads/2015/07/25-Savijnanam.pdf.

[6] Christoph Benzmüller et al. "Implementation of Carmo and Jones Dyadic Deontic Logic in Isabelle/HOL". In: *Workshop on Computational Aspects of Arguments and LogiC (CAALC 2017)*. Belgrade, Serbia, 2017. URL: http://christoph-benzmueller.de/papers/W59.pdf.

[7] David Fuenmayor and Christoph Benzmüller. "Automating Emendations of the Ontological Argument in Intensional Higher-Order Modal Logic". In: *KI 2017: Advances in Artificial Intelligence 40th Annual German Conference on AI*. LNAI. Springer, 2017. URL: http://christoph-benzmueller.de/papers/C65.pdf.

[8] David Fuenmayor and Christoph Benzmüller. "Types, Tableaus and Gödel's God in Isabelle/HOL". In: *Archive of Formal Proofs* (2017). Formally verified with Isabelle/HOL. URL: http://afp.sourceforge.net/entries/Types_Tableaus_and_Goedels_God.shtml.

[9] David Fuenmayor et al. "The Virtues of Automated Theorem Proving in Metaphysics — A Case Study: E. J. Lowe's Modal Ontological Argument". In: *Handbook of the 2nd World Congress on Logic and Religion, Warsaw, Poland*. Ed. by Stanislaw Krajewski and Piotr Balcerowicz. 2017, p. 3. URL: http://christoph-benzmueller.de/papers/C63.pdf.

[10] Tobias Gleißner, Alexander Steen, and Christoph Benzmüller. "Theorem Provers for Every Normal Modal Logic". In: *LPAR-21. 21st International Conference on Logic for Programming, Artificial Intelligence and Reasoning*. Ed. by Thomas Eiter and David Sands. Vol. 46. EPiC Series in Computing. Maun, Botswana: EasyChair, 2017, pp. 14–30. URL: https://easychair.org/publications/paper/340346.

[11] Alexander Steen, Max Wisniewski, and Christoph Benzmüller. "Going Polymorphic - TH1 Reasoning for Leo-III". In: *IWIL@LPAR 2017 Workshop and LPAR-21 Short ¡ Presentations, Maun, Botswana, May 7-12, 2017*. Ed. by Thomas Eiter et al. Vol. 1. Kalpa Publications in Computing. Maun, Botswana: EasyChair, 2017. URL: http://www.easychair.org/publications/paper/346851.

[12] Alexander Steen et al. "Capability Discovery for Automated Reasoning Systems". In: *IWIL@LPAR 2017 Workshop and LPAR-21 Short Presentations, Maun, Botswana, May 7-12, 2017*. Ed. by Thomas Eiter et al. Vol. 1. Kalpa Publications in Computing. Maun, Botswana: EasyChair, 2017. URL: http://www.easychair.org/publications/paper/346850.

[13] Matthias Bentert et al. "Analysis of an Ontological Proof Proposed by Leibniz". In: *Death and Anti-Death, Volume 14: Four Decades after Michael Polanyi, Three Centuries after G.W. Leibniz*. Ed. by Charles Tandy. Preprint: http://christoph-benzmueller.de/papers/B16.pdf. Ria University Press, 2016. DOI: 10.1007/978-3-319-45062-9_18. URL: http://www.booksamillion.com/p/Death-Anti/Charles-Tandy/9781934297261?id=6525608148199.

[14] Christoph Benzmüller and Dana Scott. "Automating Free Logic in Isabelle/HOL". In: *Mathematical Software – ICMS 2016, 5th International Congress, Proceedings*. Ed. by G.-M. Greuel et al. Vol. 9725. LNCS. Berlin, Germany: Springer, 2016, pp. 43–50. ISBN: 978-3-319-42431-6. DOI: 10.1007/978-3-319-42432-3_6. URL: http://christoph-benzmueller.de/papers/C57.pdf.

[15] Christoph Benzmüller and Dana S. Scott. "Axiomatizing Category Theory in Free Logic". In: *arXiv, http://arxiv.org/abs/1609.01493* (2016). URL: http://arxiv.org/abs/1609.01493.

[16] Christoph Benzmüller, Geoff Sutcliffe, and Raul Rojas, eds. *GCAI 2016. 2nd Global Conference on Artificial Intelligence*. Vol. 41. EPiC Series in Computing. EasyChair, 2016. URL: http://www.easychair.org/publications/volume/GCAI_2016.

[17] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "An Object-Logic Explanation for the Inconsistency in Gödel's Ontological Theory (Extended Abstract, Sister Conferences)". In: *KI 2016: Advances in Artificial Intelligence, Proceedings*. Ed. by Malte Helmert and Franz Wotawa. LNCS. Berlin, Germany: Springer, 2016, pp. 244–250. DOI: 10.1007/978-3-319-46073-4. URL: http://christoph-benzmueller.de/papers/C60.pdf.

[18] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "The Inconsistency in Gödel's Ontological Argument: A Success Story for AI in Metaphysics". In: *IJCAI 2016*. Ed. by Subbarao Kambhampati. Vol. 1-3. (Acceptance rate $\leq 25\%$). AAAI Press, 2016, pp. 936–942. ISBN: 978-1-57735-770-4. URL: http://www.ijcai.org/Proceedings/16/Papers/137.pdf.

[19] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "The Modal Collapse as a Collapse of the Modal Square of Opposition". In: *The Square of Opposition: A Cornerstone of Thought (Collection of papers related to the World Congress on the Square of Opposition IV, Vatican, 2014), http://www.springer.com/us/book/9783319450612*. Ed. by Jean-Yves Béziau and Gianfranco Basti. Studies in Universal Logic. Springer International Publishing Switzerland, 2016. DOI: 10.1007/978-3-319-45062-9_18. URL: http://christoph-benzmueller.de/papers/B15.pdf.

[20] Christoph Benzüller and Jens Otten, eds. *ARQNL 2016. Automated Reasoning in Quantified Non-Classical Logics*. Vol. 1770. CEUR Workshop Proceedings, http://ceur-ws.org, 2016, pp. 1–86. URL: http://ceur-ws.org/Vol-1770/.

[21] Harold Boley et al. "Translating Higher-Order Modal Logic from RuleML to TPTP". In: *Proceedings of the RuleML 2016 Challenge, the Special Industry Track and the RuleML 2016 Doctoral Consortium hosted by the 10th International Web Rule Symposium (RuleML 2016)*. Ed. by A. Giurca et al. Vol. Vol-1620. CEUR Workshop Proceedings. CEUR-WS.org, 2016. URL: http://ceur-ws.org/Vol-1620/paper6.pdf.

[22] Alexander Steen and Christoph Benzmüller. "Sweet SIXTEEN: Automation via Embedding into Classical Higher-Order Logic". In: *Logic and Logical Philosophy* 25 (2016), pp. 535–554. ISSN: 1425-3305. DOI: 10.12775/LLP.2016.021. URL: http://christoph-benzmueller.de/papers/J33.pdf.

[23] Alexander Steen, Max Wisniewski, and Christoph Benzmüller. "Agent-Based HOL Reasoning". In: *Mathematical Software – ICMS 2016, 5th International Congress, Proceedings*. Ed. by G.-M. Greuel et al. Vol. 9725. LNCS. Berlin, Germany: Springer, 2016, pp. 75–81. ISBN: 978-3-319-42431-6. DOI: 10.1007/978-3-319-42432-3_10. URL: http://christoph-benzmueller.de/papers/C56.pdf.

[24] Alexander Steen, Max Wisniewski, and Christoph Benzmüller. "Tutorial on Reasoning in Expressive Non-Classical Logics with Isabelle/HOL". In: *GCAI 2016, 2nd Global Conference on Artificial Intelligence*. Ed. by Christoph Benzüller, Raul Rojas, and Geoff Sutcliffe. Vol. 41. EPiC Series in Computing. Berlin, Germany: EasyChair, 2016, pp. 1–10. URL: http://www.easychair.org/publications/paper/Tutorial_on_Reasoning_in_Expressive_Non-Classical_Logics_with_Isabelle-HOL.

[25] Max Wisniewski and Christoph Benzmüller. "Is it Reasonable to Employ Agents in Theorem Proving?" In: *Proceedings of the 8th International Conference on Agents and Artificial Intelligence (ICAART 2016) – Volume 1, pages 281-286*. Ed. by Jan van den Heerik and Joaquim Filipe. Vol. 1. Rome, Italy: SCITEPRESS – Science and Technology Publications, Lda, 2016, pp. 281–286. ISBN: 978-989-758-172-4. DOI: 10.5220/0005824702810286. URL: http://christoph-benzmueller.de/papers/C53.pdf.

[26] Max Wisniewski, Alexander Steen, and Christoph Benzmüller. "Einsatz von Theorembeweisern in der Lehre". In: *Hochschuldidaktik der Informatik: 7. Fachtagung des GI-Fachbereichs Informatik und Ausbildung/Didaktik der Informatik; 13.-14. September 2016 an der Universität Potsdam*. Ed. by Andreas Schwill and Ulrike Lucke. Commentarii informaticae didacticae (CID). Potsdam, Germany: Universitätsverlag Potsdam, 2016. ISBN: 978-3-86956-376-3. URL: https://publishup.uni-potsdam.de/opus4-ubp/frontdoor/index/index/docId/9485.

[27] Max Wisniewski, Alexander Steen, and Christoph Benzmüller. "TPTP and Beyond: Representation of Quantified Non-Classical Logics". In: *ARQNL 2016. Automated Reasoning in Quantified Non-Classical Logics*. Ed. by Christoph Benzmüller and Jens Otten. Vol. 1770. CEUR Workshop Proceedings, http://ceur-ws.org, 2016, pp. 51–65. URL: http://ceur-ws.org/Vol-1770/.

[28] Max Wisniewski et al. "Effective Normalization Techniques for HOL". In: *Automated Reasoning — 8th International Joint Conference, IJCAR 2016, Coimbra, Portugal, June 27 – July 2, 2016, Proceedings*. Ed. by Nicola Olivetti and Ashish Tiwari. Vol. 9706. LNCS. Springer, 2016, pp. 362–370. ISBN: 978-3-319-40228-4. DOI: 10.1007/978-3-319-40229-1_25. URL: http://christoph-benzmueller.de/papers/C54.pdf.

[29] Christoph Benzmüller. "Gödel's Ontological Argument Revisited – Findings from a Computer-supported Analysis (invited)". In: *Handbook of the 1st World Congress on Logic and Religion, João Pessoa, Brazil*. Ed. by Ricardo Souza Silvestre and Jean-Yves Béziau. (Invited abstract). 2015, p. 13. URL: http://christoph-benzmueller.de/papers/2015-handbook-logic-and-religion.pdf.

[30] Christoph Benzmüller. "Higher-Order Automated Theorem Provers". In: *All about Proofs, Proof for All*. Ed. by David Delahaye and Bruno Woltzenlogel Paleo. Mathematical Logic and Foundations. London, UK: College Publications, 2015, pp. 171–214. ISBN: 978-1-84890-166-7. URL: http://christoph-benzmueller.de/papers/B14.pdf.

[31] Christoph Benzmüller. "HOL Provers for First-order Modal Logics — Experiments". In: *ARQNL 2014. Automated Reasoning in Quantified Non-Classical Logics*. Ed. by Christoph Benzmüller and Jens Otten. Vol. 33. EPiC Series in Computing. EasyChair, 2015, pp. 37–41. URL: http://easychair.org/publications/paper/HOL_Provers_for_First-order_Modal_Logics_-_Experiments.

[32] Christoph Benzmüller. "Invited Talk: On a (Quite) Universal Theorem Proving Approach and Its Application in Metaphysics". In: *TABLEAUX 2015*. Ed. by Hans De Nivelle. Vol. 9323. LNAI. (Invited paper). Wroclaw, Poland: Springer, 2015, pp. 213–220. DOI: 10.1007/978-3-319-24312-2_15. URL: http://christoph-benzmueller.de/papers/C50.pdf.

[33] Christoph Benzmüller, Maximilian Claus, and Nik Sultana. "Systematic Verification of the Modal Logic Cube in Isabelle/HOL". In: *PxTP 2015*. Ed. by Cezary Kaliszyk and Andrei Paskevich. Vol. 186. Berlin, Germany: EPTCS, 2015, pp. 27–41. DOI: 10.4204/EPTCS.186.5. URL: http://christoph-benzmueller.de/papers/C47.pdf.

[34] Christoph Benzmüller, Alexander Steen, and Max Wisniewski. "News — 25th International Conference on Automated Deduction (CADE-25)". In: *Künstliche Intelligenz* 29 (4 2015). Non-reviewed conference report, pp. 451–452. DOI: 10.1007/s13218-015-0402-z.

[35] Christoph Benzmüller, Leon Weber, and Bruno Woltzenlogel Paleo. "Computer-Assisted Analysis of the Anderson-Hájek Ontological Controversy". In: *Handbook of the 1st World Congress on Logic and Religion, Joao Pessoa, Brasil*. Ed. by Ricardo Souza Silvestre and Jean-Yves Béziau. (superseded by 2016 article in Logica Universalis). 2015, pp. 53–54. URL: http://christoph-benzmueller.de/papers/2015-handbook-logic-and-religion.pdf.

[36] Christoph Benzmüller, Max Wisniewski, and Alexander Steen. "Computational Metaphysics — Bewerbung zum zentralen Lehrpreis der Freien Universität Berlin". This lecture course proposal received the 2015 central teaching award of FU Berlin. 2015. URL: http://christoph-benzmueller.de/papers/R57.pdf.

[37] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "Experiments in Computational Metaphysics: Gödel's Proof of God's Existence". In: *Science & Spiritual Quest, Proceedings of the 9th All India Students' Conference, 30th October – 1 November, 2015, IIT Kharagpur, India*. Ed. by Subhash C. Mishram, Ramgopal Uppaluri, and Varun Agarwal. (Invited paper). Bhaktivedanta Institute, Kolkata, www.binstitute.org, 2015, pp. 23–40. URL: http://christoph-benzmueller.de/papers/C52.pdf.

[38] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "Higher-Order Modal Logics: Automation and Applications". In: *Reasoning Web 2015*. Ed. by Adrian Paschke and Wolfgang Faber. LNCS 9203. (Invited paper). Berlin, Germany: Springer, 2015, pp. 32–74. DOI: 10.1007/978-3-319-21768-0_2. URL: http://christoph-benzmueller.de/papers/C46.pdf.

[39] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "Interacting with Modal Logics in the Coq Proof Assistant". In: *Computer Science - Theory and Applications - 10th International Computer Science Symposium in Russia, CSR 2015, Listvyanka, Russia, July 13-17, 2015, Proceedings*. Ed. by Lev D. Beklemishev and Daniil V. Musatov. Vol. 9139. LNCS. Springer, 2015, pp. 398–411. DOI: 10.1007/978-3-319-20297-6_25. URL: http://christoph-benzmueller.de/papers/C44.pdf.

[40] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "On Logic Embeddings and Gödel's God". In: *Recent Trends in Algebraic Development Techniques: 22nd International Workshop, WADT 2014, Sinaia, Romania, September 4-7, 2014, Revised Selected Papers*. Ed. by Mihai Codescu, Razvan Diaconescu, and Ionut Tutu. LNCS 9563. (Invited paper). Sinaia, Romania: Springer, 2015, pp. 3–6. ISBN: 978-3-319-28114-8. DOI: 10.1007/978-3-319-28114-8_1. URL: http://christoph-benzmueller.de/papers/W55.pdf.

[41] Christoph Benzmüller et al. "The Higher-Order Prover LEO-II". In: *Journal of Automated Reasoning* 55.4 (2015), pp. 389–404. DOI: 10.1007/s10817-015-9348-y. URL: http://christoph-benzmueller.de/papers/J30.pdf.

[42] Christoph Benzüller and Jens Otten, eds. *ARQNL 2014. Automated Reasoning in Quantified Non-Classical Logics*. Vol. 33. EPiC Series in Computing. EasyChair, 2015, pp. 1–86. URL: http://easychair.org/publications/volume/ARQNL2014.

[43] Alexander Steen and Christoph Benzmüller. "Sweet SIXTEEN: Automation via Embedding into Classical Higher-Order Logic". In: *7th International Conference Non-Classical Logic – Theory and Applications, Torun, Poland*. 2015. URL: http://christoph-benzmueller.de/papers/C49.pdf.

[44] Alexander Steen and Christoph Benzmüller. "There Is No Best Beta-Normalization Strategy for Higher-Order Reasoners". In: *Logic for Programming, Artificial Intelligence, and Reasoning (LPAR)*. Ed. by M. Davis et al. Vol. 9450. LNAI. Suva, Fiji: Springer, 2015, pp. 329–339. ISBN: 978-3-662-48898-0. DOI: 10.1007/978-3-662-48899-7_23. URL: http://christoph-benzmueller.de/papers/C51.pdf.

[45] Nik Sultana, Christoph Benzmüller, and Lawrence C. Paulson. "Proofs and reconstructions". In: *FroCoS 2015*. Ed. by Carsten Lutz and Silvio Ranise. Vol. 9322. LNAI. Wroclaw, Poland: Springer, 2015, pp. 256–271. DOI: 10.1007/978-3-319-24246-0_16. URL: http://christoph-benzmueller.de/papers/C48.pdf.

[46] Max Wisniewski, Alexander Steen, and Christoph Benzmüller. "LeoPARD - A Generic Platform for the Implementation of Higher-Order Reasoners". In: *Intelligent Computer Mathematics - International Conference, CICM 2015, Washington, DC, USA, July 13-17, 2015, Proceedings*. Ed. by Manfred Kerber et al. Vol. 9150. LNCS. Springer, 2015, pp. 325–330. DOI: 10.1007/978-3-319-20615-8_22. URL: http://christoph-benzmueller.de/papers/C45.pdf.

[47] Christoph Benzmüller and Dale Miller. "Automation of Higher-Order Logic". In: *Handbook of the History of Logic, Volume 9 — Computational Logic*. Ed. by Dov M. Gabbay, Jörg H. Siekmann, and John Woods. North Holland, Elsevier, 2014, pp. 215–254. ISBN: 978-0-444-51624-4. DOI: 10.1016/B978-0-444-51624-4.50005-8. URL: http://christoph-benzmueller.de/papers/B5.pdf.

[48] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "Automating Gödel's Ontological Proof of God's Existence with Higher-order Automated Theorem Provers". In: *ECAI 2014*. Ed. by Torsten Schaub, Gerhard Friedrich, and Barry O'Sullivan. Vol. 263. Frontiers in Artificial Intelligence and Applications. (Acceptance rate $\leq 28\%$). IOS Press, 2014, pp. 93–98. DOI: 10.3233/978-1-61499-419-0-93. URL: http://christoph-benzmueller.de/papers/C40.pdf.

[49] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "Gödel's Proof of God's Existence". In: *Handbook of the World Congress on the Square of Opposition IV*. Ed. by Jean-Yves Beziau and Katarzyna Gan-Krzywoszynska. (superseded by ECAI-2014 paper). 2014, pp. 22–23. URL: http://www.stoqatpul.org/lat/materials/hand_square2014.pdf.

[50] Christoph Benzmüller and Bruno Woltzenlogel Paleo. *Modal Logic in Coq and Scott's Version of Gödel's Proof of God's Existence (Rough Diamond Proof Pearl)*. (Non-reviewed, superseded by CSR-2015 paper). 2014.

[51] Christoph Benzüller and Bruno Woltzenlogel Paleo, eds. *Proceedings of the 11th International Workshop on User Interfaces for Theorem Provers (UITP 2014), Vienna, Austria*. Vol. 167. Electronic Proceedings in Theoretical Computer Science (EPTCS). 2014, pp. 1–94. DOI: 10.4204/EPTCS.167. URL: http://eptcs.web.cse.unsw.edu.au/content.cgi?UITP2014.

[52] Max Wisniewski, Alexander Steen, and Christoph Benzmüller. "The Leo-III Project". In: *Joint Automated Reasoning Workshop and Deduktionstreffen*. Ed. by Alexander Bolotov and Manfred Kerber. 2014, p. 38. URL: http://christoph-benzmueller.de/papers/W53.pdf.

[53] Christoph Benzmüller. "A Top-down Approach to Combining Logics". In: *Proc. of the 5th International Conference on Agents and Artificial Intelligence (ICAART)*. Ed. by Joaquim Filipe and Ana Fred. Vol. 1. Barcelona, Spain: SCITEPRESS – Science and Technology Publications, Lda, 2013, pp. 346–351. DOI: 10.5220/0004324803460351. URL: http://christoph-benzmueller.de/papers/C35.pdf.

[54] Christoph Benzmüller. "Automating Quantified Conditional Logics in HOL". In: *23rd International Joint Conference on Artificial Intelligence (IJCAI-13)*. Ed. by Francesca Rossi. Beijing, China: AAAI Press, 2013, pp. 746–753. ISBN: 978-1-57735-633-2. URL: http://christoph-benzmueller.de/papers/C37.pdf.

[55] Christoph Benzmüller. "CADE 2015 in Berlin: A Proposal". 2013.

[56] Christoph Benzmüller. "Cut-free Calculi for Challenge Logics in a Lazy Way". In: *Proceedings of the International Workshop on Algebraic Logic in Computer Science*. Ed. by Carles Noguera Clint van Alten Petr Cintula. 2013. URL: http://christoph-benzmueller.de/papers/W51.

[57] Christoph Benzmüller. "HOL based Universal Reasoning". In: *Handbook of the 4th World Congress and School on Universal Logic*. Ed. by J.Y. Beziau et al. (Superseded by ICAART-2013 paper). Rio de Janeiro, Brazil, 2013, pp. 232–233. ISBN: 978-85-400-0682-9. URL: http://christoph-benzmueller.de/papers/C36.pdf.

[58] Christoph Benzmüller, Jens Otten, and Thomas Raths. "Implementing Different Proof Calculi for First-order Modal Logics". In: *PAAR-2012*. Ed. by Pascal Fontaine, Renate A. Schmidt, and Stephan Schulz. Vol. 21. EPiC Series in Computing. EasyChair, 2013, pp. 12–18. URL: http://www.easychair.org/publications/?page=1303066787.

[59] Christoph Benzmüller and Lawrence Paulson. "Quantified Multimodal Logics in Simple Type Theory". In: *Logica Universalis (Special Issue on Multimodal Logics)* 7.1 (2013), pp. 7–20. DOI: 10.1007/s11787-012-0052-y. URL: http://christoph-benzmueller.de/papers/J23.pdf.

[60] Christoph Benzmüller and Thomas Raths. "HOL based First-order Modal Logic Provers". In: *Proceedings of the 19th International Conference on Logic for Programming, Artificial Intelligence and Reasoning (LPAR)*. Ed. by Kenneth L. McMillan, Aart Middeldorp, and Andrei Voronkov. Vol. 8312. LNCS. Stellenbosch, South Africa: Springer, 2013, pp. 127–136. ISBN: 978-3-642-45220-8. DOI: 10.1007/978-3-642-45221-5_9. URL: http://christoph-benzmueller.de/papers/C38.pdf.

[61] Christoph Benzmüller and Nik Sultana. "LEO-II Version 1.5". In: *PxTP 2013*. Ed. by Jasmin Christian Blanchette and Josef Urban. Vol. 14. EPiC Series in Computing. EasyChair, 2013, pp. 2–10. URL: http://www.easychair.org/publications/?page=1802176591.

[62] Christoph Benzmüller and Nik Sultana. "Update report: LEO-II version 1.5". In: *CoRR* abs/1303.3761 (2013). URL: http://arxiv.org/abs/1303.3761.

[63] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "Formalization, Mechanization and Automation of Gödel's Proof of God's Existence". (not reviewed, superseded by ECAI-2014 paper). 2013. URL: http://arxiv.org/abs/1308.4526.

[64] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "Gödel's God in Isabelle/HOL". In: *Archive of Formal Proofs* (2013). (Formally verified). URL: http://afp.sourceforge.net/entries/GoedelGod.shtml.

[65] Christoph Benzmüller and Bruno Woltzenlogel Paleo. "Gödel's God on the Computer". In: *Proceedings of the 10th International Workshop on the Implementation of Logics*. Ed. by S. Schulz, G. Sutcliffe, and B. Konev. (Invited paper). 2013. URL: http://christoph-benzmueller.de/papers/W50.pdf.

[66] Christoph Benzmüller and Marco Ziener. "Automated Consistency Checking of Expressive Ontologies — Beware of the Wrong Interpretation of Success!" In: *The 5th International Workshop on Acquisition, Representation and Reasoning with Contextualized Knowledge (ARCOE-LogIC 2013)*. Ed. by Michael Fink et al. Corunna, Spain, 2013. URL: http://christoph-benzmueller.de/papers/W49.pdf.

[67] Adam Pease and Christoph Benzmüller. "Sigma: An Integrated Development Environment for Formal Ontology". In: *AI Communications (Special Issue on Intelligent Engineering Techniques for Knowledge Bases)* 26.1 (2013), pp. 79–97. DOI: 10.3233/AIC-120549. URL: http://christoph-benzmueller.de/papers/J24.pdf.

[68] Nik Sultana and Christoph Benzmüller. "Understanding LEO-II's Proofs". In: *IWIL 2012*. Ed. by Konstantin Korovin, Stephan Schulz, and Eugenia Ternovska. Vol. 22. EPiC Series in Computing. Merida, Venezuela: EasyChair, 2013, pp. 33–52. URL: http://www.easychair.org/publications/?page=572811915.

[69] Bruno Woltzenlogel Paleo and Christoph Benzmüller. "Automated Verification and Reconstruction of Gödel's Proof of God's Existence". In: *OCG Journal* (2013). (Invited article).

[70] Christoph Benzmüller, Jens Otten, and Thomas Raths. "Implementing and Evaluating Provers for First-order Modal Logics". In: *ECAI 2012*. Ed. by Luc De Raedt et al. Vol. 242. Frontiers in Artificial Intelligence and Applications. Montpellier, France: IOS Press, 2012, pp. 163–168. ISBN: 978-1-61499-097-0. DOI: 10.3233/978-1-61499-098-7-163. URL: http://christoph-benzmueller.de/papers/C34.pdf.

[71] Christoph Benzmüller and Adam Pease. "Higher-order Aspects and Context in SUMO". In: *Journal of Web Semantics (Special Issue on Reasoning with context in the Semantic Web)* 12-13 (2012), pp. 104–117. DOI: 10.1016/j.websem.2011.11.008. URL: http://christoph-benzmueller.de/papers/J27.pdf.

[72] Christoph Benzmüller and Adam Pease. "Progress in Automating Higher-Order Ontology Reasoning". In: *PAAR-2010 – Workshop on Practical Aspects of Automated Reasoning*. Ed. by Renate A. Schmidt, Stephan Schulz, and Boris Konev. Vol. 9. EPiC Series in Computing. EasyChair, 2012, pp. 22–32. URL: http://www.easychair.org/publications/?page=999569486.

[73] Christoph Benzmüller and Thomas Raths. *FMLtoHOL (version 1.0): Automating First-order Modal Logics with LEO-II and Friends*. Tech. rep. arXiv:1207.6685. Freie Universität Berlin, Germany, 2012. URL: http://arxiv.org/abs/1207.6685.

[74] Christoph Benzmüller and Marvin Schiller. "Adaptive Assertion-Level Proofs". In: *EMSQMS 2010 – Workshop on Evaluation Methods for Solvers and Quality Metrics for Solutions*. Ed. by Aaron Stump, Geoff Sutcliffe, and Cesare Tinelli. Vol. 6. EPiC Series in Computing. EasyChair, 2012, pp. 39–40. URL: http://www.easychair.org/publications/?page=1718758449.

[75] Christoph Benzmüller et al. "Embedding and Automating Conditional Logics in Classical Higher-Order Logic". In: *Annals of Mathematics and Artificial Intelligence* 66.1-4 (2012), pp. 257–271. DOI: 10.1007/s10472-012-9320-z. URL: http://christoph-benzmueller.de/papers/J26.pdf.

[76] Christoph Benzmüller. "Combining and Automating Classical and Non-Classical Logics in Classical Higher-Order Logic". In: *Annals of Mathematics and Artificial Intelligence (Special issue Computational logics in Multi-agent Systems (CLIMA XI))* 62.1-2 (2011), pp. 103–128. DOI: 10.1007/s10472-011-9249-7. URL: http://christoph-benzmueller.de/papers/J25.pdf.

[77] Christoph Benzmüller and Valerio Genovese. "Quantified Conditional Logics are Fragments of HOL". In: *The International Conference on Non-classical Modal and Predicate Logics (NCMPL)*. (The conference had no published proceedings; the paper is available as arXiv:1204.5920v1; superseded by IJCAI-2013 paper). Guangzhou (Canton), China, 2011. URL: http://arxiv.org/abs/1204.5920v1.

[78] Christoph Benzmüller and Adam Pease. "Knowledge Engineering Tools". In: *Ontology: A Practical Guide*. Ed. by Adam Pease. (This chapter has some essential overlap with the 2012 journal article with A. Pease titled Higher-Order Aspects and Context in SUMO; non-reviewed here). Articulate Software Press, Angwin, CA, USA, 2011, pp. 171–214. ISBN: 978-1-889455-10-5. URL: http://www.ontologyportal.org/Book.html.

[79] Christoph Benzmüller et al. *Embedding and Automating Conditional Logics in Classical Higher-Order Logic*. Tech. rep. arXiv:1106.3685. Freie Universität Berlin, Germany, 2011. URL: http://arxiv.org/abs/1106.3685.

[80] Serge Autexier et al. "OMEGA: Resource-Adaptive Processes in an Automated Reasoning Systems". In: *Resource-Adaptive Cognitive Processes*. Ed. by Matthew W. Crocker and Jörg Siekmann. Cognitive Technologies. (Final project report, DFG SFB 378). Springer, 2010, pp. 389–423. ISBN: 978-3-540-89407-0. DOI: 10.1007/978-3-540-89408-7_17. URL: http://christoph-benzmueller.de/papers/B10.pdf.

[81] Christoph Benzmüller. "Combining Logics in Simple Type Theory". In: *Computational Logic in Multi-Agent Systems, 11th International Workshop, CLIMA XI, Lisbon, Portugal, August 16-17, 2010. Proceedings*. Ed. by Jürgen Dix et al. Vol. 6245. Lecture Notes in Artifical Intelligence. Lisbon, Portugal: Springer, 2010, pp. 33–48. DOI: 10.1007/978-3-642-14977-1_6. URL: http://christoph-benzmueller.de/papers/W41.pdf.

[82] Christoph Benzmüller. "Simple Type Theory as Framework for Combining Logics". In: *Contest paper at the World Congress and School on Universal Logic III (UNILOG)*. The conference had no published proceedings; the paper is available as arXiv:1004.5500v1. Lisbon, Portugal, 2010. URL: http://arxiv.org/abs/1004.5500v1.

[83] Christoph Benzmüller. "Verifying the Modal Logic Cube is an Easy Task (for Higher-Order Automated Reasoners)". In: *Verification, Induction, Termination Analysis - Festschrift for Christoph Walther on the Occasion of His 60th Birthday*. Ed. by Simon Siegler and Nathan Wasser. Vol. 6463. LNCS. (Superseded by PxTP-2015 paper). Springer, 2010, pp. 117–128. DOI: 10.1007/978-3-642-17172-7_7. URL: http://christoph-benzmueller.de/papers/B12.pdf.

[84] Christoph Benzmüller and Lawrence Paulson. "Multimodal and Intuitionistic Logics in Simple Type Theory". In: *The Logic Journal of the IGPL* 18.6 (2010), pp. 881–892. DOI: 10.1093/jigpal/jzp080. URL: http://christoph-benzmueller.de/papers/J21.pdf.

[85] Christoph Benzmüller and Adam Pease. "Reasoning with Embedded Formulas and Modalities in SUMO". In: *The ECAI-10 Workshop on Automated Reasoning about Context and Ontology Evolution (ARCOE-10)*. Ed. by A. Bundy et al. (Superseded by 2012 article in Journal of Web Semantics). August 16-17, Lisbon, Portugal, 2010. URL: http://christoph-benzmueller.de/papers/W44.pdf.

[86] Christoph Benzmüller, Marvin Schiller, and Jörg Siekmann. "Resource-Bounded Modelling and Analysis of Human-Level Interactive Proofs". In: *Resource-Adaptive Cognitive Processes*. Ed. by Matthew W. Crocker and Jörg Siekmann. Cognitive Technologies. (Final project report, DFG SFB 378). Springer, 2010, pp. 291–311. ISBN: 978-3-540-89407-0. DOI: 10.1007/978-3-540-89408-7_13. URL: http://christoph-benzmueller.de/papers/B11.pdf.

[87] Adam Pease and Christoph Benzmüller. "Ontology Archaeology: Mining a Decade of Effort on the Suggested Upper Merged Ontology". In: *The ECAI-10 Workshop on Automated Reasoning about Context and Ontology Evolution (ARCOE-10)*. Ed. by A. Bundy et al. August 16-17, Lisbon, Portugal, 2010. URL: http://christoph-benzmueller.de/papers/W43.pdf.

[88] Adam Pease and Christoph Benzmüller. "Sigma: An Integrated Development Environment for Logical Theory Development". In: *The ECAI 2010 Workshop on Intelligent Engineering Techniques for Knowledge Bases (IKBET'2010)*. (Superseded by 2013 article in AI Communications). Lisbon, Portugal, 2010. URL: http://christoph-benzmueller.de/papers/W42.pdf.

[89] Marvin Schiller and Christoph Benzmüller. "Human-Oriented Proof Techniques are Relevant for Proof Tutoring". In: *Workshop on Mathematically Intelligent Proof Search (MIPS 2010, affiliated with CICM 2010)*. Paris, France, 2010. URL: http://christoph-benzmueller.de/papers/W45.pdf.

[90] Geoff Sutcliffe and Christoph Benzmüller. "Automated Reasoning in Higher-Order Logic using the TPTP THF Infrastructure". In: *Journal of Formalized Reasoning* 3.1 (2010), pp. 1–27. ISSN: 1972-5787. URL: http://christoph-benzmueller.de/papers/J22.pdf.

[91] Serge Autexier and Christoph Benzmüller. "Preface: Proceedings of the 8th Workshop on User Interfaces for Theorem Provers (UITP 2008)". In: *Electronic Notes in Theoretical Computer Science* 226.1 (2009), pp. 1–2. ISSN: 1571-0661. DOI: 10.1016/j.entcs.2008.12.093. URL: http://christoph-benzmueller.de/papers/J20.pdf.

[92] Serge Autexier and Christoph Benzüller, eds. *Proceedings of the 8th International Workshop on User Interfaces for Theorem Provers (UITP 2008), Montréal, Canada*. Vol. 226. Electronic Notes in Theoretical Computer Science. Elsevier, 2009, pp. 1–106. URL: http://www.sciencedirect.com/science/journal/15710661/226/.

[93] Christoph Benzmüller. *A Note on LEO-II and the Basic Fragment of Simple Type Theory*. Tech. rep. AAR Newsletter No. 84, July 2009. URL: http://www.AARInc.org/Newsletters/084-2009-07.html.

[94] Christoph Benzmüller. "Automating Access Control Logic in Simple Type Theory with LEO-II". In: *Emerging Challenges for Security, Privacy and Trust, 24th IFIP TC 11 International Information Security Conference, SEC 2009, Pafos, Cyprus, May 18-20, 2009. Proceedings*. Ed. by Dimitris Gritzalis and Javier López. Vol. 297. IFIP. Springer, 2009, pp. 387–398. ISBN: 978-3-642-01243-3. DOI: 10.1007/978-3-642-01244-0_34. URL: http://christoph-benzmueller.de/papers/C27.pdf.

[95] Christoph Benzmüller. *Automating Quantified Multimodal Logics in Simple Type Theory – A Case Study*. Tech. rep. arXiv:0905.4369. DFKI Bremen GmbH, Safe and Secure Cognitive Systems, Cartesium, Enrique Schmidt Str. 5, D–28359 Bremen, Germany: Saarland University, 2009. URL: http://arxiv.org/abs/0905.4369.

[96] Christoph Benzmüller. "LEO-II im Ontologieschliessen – Antrag auf ein Forschungsvorhaben an die DFG". International University in Germany, Bruchsal. 2009. URL: http://christoph-benzmueller.de/papers/R47.pdf.

[97] Christoph Benzmüller, Chad Brown, and Michael Kohlhase. "Cut-Simulation and Impredicativity". In: *Logical Methods in Computer Science* 5.1:6 (2009), pp. 1–21. DOI: 10.2168/LMCS-5(1:6)2009. URL: http://christoph-benzmueller.de/papers/J18.pdf.

[98] Christoph Benzmüller and Lawrence Paulson. *Quantified Multimodal Logics in Simple Type Theory*. Tech. rep. arXiv:0905.2435. DFKI Bremen GmbH, Safe and Secure Cognitive Systems, Cartesium, Enrique Schmidt Str. 5, D–28359 Bremen, Germany: Saarland University, 2009. URL: http://arxiv.org/abs/0905.2435.

[99] Christoph Benzmüller and Geoff Sutcliffe. *The THFTPTP Project — An Infrastructure for Typed Higher-order Form Automated Theorem Proving Marie Curie International Incoming Fellowship Grant Agreement PIIF-GA-2008-219982 Project Report — Implications*. Tech. rep. Saarland University, 2009. URL: http://christoph-benzmueller.de/papers/R49.pdf.

[100] Christoph Benzmüller and Geoff Sutcliffe. *The THFTPTP Project — An Infrastructure for Typed Higher-order Form Automated Theorem Proving Marie Curie International Incoming Fellowship Grant Agreement PIIF-GA-2008-219982 Project Report — Scientific*. Tech. rep. Saarland University, 2009. URL: http://christoph-benzmueller.de/papers/R50.pdf.

[101] Christoph Benzmüller and Claus-Peter Wirth. "Effective Higher-Order Automated Theorem Proving with integrated Descente Infinie and Presburger Arithmetic LEO-III". DFG research project proposal. 2009. URL: http://christoph-benzmueller.de/papers/R51.pdf.

[102] Marvin Schiller and Christoph Benzmüller. "Granularity-Adaptive Proof Presentation". In: *Artificial Intelligence in Education: Building Learning Systems that Care: From Knowledge Representation to Affective Modelling, Proceedings of the 14th International Conference on Artificial Intelligence in Education, AIED 2009, July 6-10, 2009, Brighton, UK*. Vol. 200. Frontiers in Artificial Intelligence and Applications. IOS Press, 2009, pp. 599–601. ISBN: 978-1-60750-028-5. URL: http://christoph-benzmueller.de/papers/C30.pdf.

[103] Marvin Schiller and Christoph Benzmüller. *Granularity-Adaptive Proof Presentation*. Tech. rep. arXiv:0903.0314. DFKI Bremen GmbH, Safe and Secure Cognitive Systems, Cartesium, Enrique Schmidt Str. 5, D–28359 Bremen, Germany: Saarland University, 2009. URL: http://arxiv.org/abs/0903.0314.

[104] Marvin Schiller and Christoph Benzmüller. "Presenting Proofs with Adapted Granularity". In: *KI 2009: Advances in Artificial Intelligence, 32nd Annual German Conference on AI, Paderborn, Germany, September 15-18, 2009. Proceedings*. Ed. by Bärbel Mertsching, Marcus Hund, and Muhammad Zaheer Aziz. Vol. 5803. LNAI. Paderborn, Germany: Springer, 2009, pp. 289–297. ISBN: 978-3-642-04616-2. DOI: 10.1007/978-3-642-04617-9_37. URL: http://christoph-benzmueller.de/papers/C31.pdf.

[105] Marvin Schiller and Christoph Benzmüller. "Proof Granularity as an Empirical Problem?" In: *CSEDU 2009 - Proceedings of the First International Conference on Computer Supported Education, Lisboa, Portugal, March 23-26, 2009 - Volume 1*. Ed. by José A. Moinhos Cordeiro et al. SciTePress Digital Library, 2009, pp. 350–354. ISBN: 978-989-8111-82-1. DOI: 10.5220/0002159603500354. URL: http://christoph-benzmueller.de/papers/C28.pdf.

[106] Geoff Sutcliffe et al. "Progress in the Development of Automated Theorem Proving for Higher-order Logic". In: *Automated Deduction - CADE-22, 22nd International Conference on Automated Deduction, Montreal, Canada, August 2-7, 2009. Proceedings*. Ed. by Renate Schmidt. Vol. 5663. LNCS. Springer, 2009, pp. 116–130. ISBN: 978-3-642-02958-5. DOI: 10.1007/978-3-642-02959-2_8. URL: http://christoph-benzmueller.de/papers/C29.pdf.

[107] Claus-Peter Wirth et al. "Jacques Herbrand: Life, Logic, and Automated Deduction". In: *Handbook of the History of Logic, Volume 5 – Logic from Russell to Church*. Ed. by Dov Gabbay and John Woods. Elsevier, 2009. DOI: 10.1016/S1874-5857(09)70009-3. URL: http://www.sciencedirect.com/science/article/pii/S1874585709700093.

[108] Claus-Peter Wirth et al. *Lectures on Jacques Herbrand as a Logician*. arXiv:0902.4682. SEKI Publications (ISSN 1437-4447), 2009. URL: http://arxiv.org/abs/0902.4682.

[109] Serge Autexier et al. "Organisation, Transformation, and Propagation of Mathematical Knowledge in Omega". In: *Mathematics in Computer Science* 2.2 (2008), pp. 253–277. DOI: 10.1007/s11786-008-0054-6. URL: http://christoph-benzmueller.de/papers/J17.pdf.

[110] Christoph Benzmüller. *Automating Access Control Logics in Simple Type Theory with LEO-II*. SEKI Report SR-2008-01. arXiv:0901.3574. Fachbereich Informatik, Universität des Saarlandes, Saarbrücken, Germany, 2008. URL: http://arxiv.org/abs/0901.3574.

[111] Christoph Benzmüller, Chad Brown, and Michael Kohlhase. "Cut Elimination with Xi-Functionality". In: *Reasoning in Simple Type Theory — Festschrift in Honor of Peter B. Andrews on His 70th Birthday*. Ed. by Christoph Benzmüller et al. Studies in Logic, Mathematical Logic and Foundations. College Publications, 2008, pp. 84–100. ISBN: 978-1-904987-70-3. URL: http://christoph-benzmueller.de/papers/B8.pdf.

[112] Christoph Benzmüller and Lawrence Paulson. "Exploring Properties of Normal Multimodal Logics in Simple Type Theory with LEO-II". In: *Reasoning in Simple Type Theory — Festschrift in Honor of Peter B. Andrews on His 70th Birthday*. Ed. by Christoph Benzmüller et al. Studies in Logic, Mathematical Logic and Foundations. (Superseded by 2013 article in Logica Universalis). College Publications, 2008, pp. 386–406. ISBN: 978-1-904987-70-3. URL: http://christoph-benzmueller.de/papers/B9.pdf.

[113] Christoph Benzmüller, Florian Rabe, and Geoff Sutcliffe. "THF0 – The Core of the TPTP Language for Classical Higher-Order Logic". In: *Automated Reasoning, 4th International Joint Conference, IJCAR 2008, Sydney, Australia, August 12-15, 2008, Proceedings*. Ed. by Alessandro Armando, Peter Baumgartner, and Gilles Dowek. Vol. 5195. LNCS. Springer, 2008, pp. 491–506. DOI: 10.1007/978-3-540-71070-7_41. URL: http://christoph-benzmueller.de/papers/C25.pdf.

[114] Christoph Benzmüller et al. "Combined Reasoning by Automated Cooperation". In: *Journal of Applied Logic* 6.3 (2008), pp. 318–342. DOI: 10.1016/j.jal.2007.06.003. URL: http://christoph-benzmueller.de/papers/J16.pdf.

[115] Christoph Benzmüller et al. "Evaluation of Systems for Higher-order Logic (ESHOL)". In: *Proceedings of the First International Workshop on Practical Aspects of Automated Reasoning, Sydney, Australia, August 10-11, 2008*. Ed. by Boris Konev, Renate A. Schmidt, and Stephan Schulz. Vol. 373. CEUR Workshop Proceedings. (Invited non-reviewed paper). CEUR-WS.org, 2008. URL: http://christoph-benzmueller.de/papers/W39.pdf.

[116] Christoph Benzmüller et al. "LEO-II - A Cooperative Automatic Theorem Prover for Higher-Order Logic (System Description)". In: *Automated Reasoning, 4th International Joint Conference, IJCAR 2008, Sydney, Australia, August 12-15, 2008, Proceedings*. Ed. by Alessandro Armando, Peter Baumgartner, and Gilles Dowek. Vol. 5195. LNCS. Springer, 2008, pp. 162–170. DOI: 10.1007/978-3-540-71070-7_14. URL: http://christoph-benzmueller.de/papers/C26.pdf.

[117] Christoph Benzmüller et al., eds. *Reasoning in Simple Type Theory – Festschrift in Honor of Peter B. Andrews on His 70th Birthday*. Studies in Logic, Mathematical Logic and Foundations. College Publications, 2008, p. 460. ISBN: 978-1-904987-70-3. URL: http://www.collegepublications.co.uk/logic/mlf/?00010.

[118] Manfred Pinkal et al. "DIALOG: Natural Language-based Interaction with a Mathematics Assistance System". Project report in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes. 2008. URL: http://christoph-benzmueller.de/papers/R41.pdf.

[119] Marvin Schiller, Dominik Dietrich, and Christoph Benzmüller. "Proof Step Analysis for Proof Tutoring – A Learning Approach to Granularity". In: *Teaching Mathematics and Computer Science* 6.2 (2008), pp. 325–343. ISSN: 1589-7389. URL: http://christoph-benzmueller.de/papers/J19.pdf.

[120] Jörg Siekmann, Serge Autexier, and Christoph Benzmüller. "OMEGA: Agent-oriented Proof Planning". Project report in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes. 2008. URL: http://christoph-benzmueller.de/papers/R40.pdf.

[121] Serge Autexier and Christoph Benzmüller. "Preface: Proceedings of the 7th Workshop on User Interfaces for Theorem Provers (UITP 2006)". In: *Electronic Notes in Theoretical Computer Science* 174.2 (2007), pp. 1–2. ISSN: 1571-0661. DOI: 10.1016/j.entcs.2006.09.017. URL: http://christoph-benzmueller.de/papers/J15.pdf.

[122] Serge Autexier and Christoph Benzmüller, eds. *User Interfaces for Theorem Provers, Proceedings of UITP'06*. Vol. 174. Electronic Notes in Theoretical Computer Science 2. Elsevier, 2007, pp. 1–2. URL: http://www.sciencedirect.com/science/journal/15710661/174/2.

[123] Christoph Benzmüller and Chad Brown. "The curious inference of Boolos in MIZAR and OMEGA". In: *From Insight to Proof – Festschrift in Honour of Andrzej Trybulec*. Ed. by Roman Matuszewski and Anna Zalewska. Vol. 10(23). Studies in Logic, Grammar, and Rhetoric. The University of Bialystok, Polen, 2007, pp. 299–388. ISBN: 978-83-7431-128-1. URL: http://christoph-benzmueller.de/papers/B6.pdf.

[124] Christoph Benzmüller et al. "Deep Inference for Automated Proof Tutoring?" In: *KI 2007: Advances in Artificial Intelligence, 30th Annual German Conference on AI, KI 2007, Osnabrück, Germany, September 10-13, 2007, Proceedings*. Ed. by Joachim Hertzberg, Michael Beetz, and Roman Englert. Vol. 4667. Springer, 2007, pp. 435–439. DOI: 10.1007/978-3-540-74565-5_34. URL: http://christoph-benzmueller.de/papers/C24.pdf.

[125] Christoph Benzmüller et al. "DiaWOz-II - A Tool for Wizard-of-Oz Experiments in Mathematics". In: *KI 2006: Advances in Artificial Intelligence, 29th Annual German Conference on AI, KI 2006, Bremen, Germany, June 14-17, 2006, Proceedings*. Ed. by Christian Freksa, Michael Kohlhase, and Kerstin Schill. Vol. 4314. LNCS. Springer, 2007, pp. 159–173. DOI: 10.1007/978-3-540-69912-5_13. URL: http://christoph-benzmueller.de/papers/C22.pdf.

[126] Christoph Benzmüller et al. "Natural Language Dialog with a Tutor System for Mathematical Proofs". In: *Cognitive Systems*. Ed. by Ruqian Lu, Jörg Siekmann, and Carsten Ullrich. Vol. 4429. LNCS. Springer, 2007, pp. 1–14. ISBN: 978-3-540-70933-6. DOI: 10.1007/978-3-540-70934-3_1. URL: http://christoph-benzmueller.de/papers/B7.pdf.

[127] Christoph Benzmüller et al. "Progress Report on LEO-II – An Automatic Theorem Prover for Higher-Order Logic". In: *TPHOLs 2007 Emerging Trends Proceedings*. Internal Report 364/07, Department of Computer Science, University Kaiserslautern, Germany, 2007, pp. 33–48. URL: http://christoph-benzmueller.de/papers/W37.pdf.

[128] Christoph Benzmüller et al. "The LEO-II Project". In: *Proceedings of the Fourteenth Workshop on Automated Reasoning, Bridging the Gap between Theory and Practice*. (Mildly reviewed). Imperial College, London, England, 2007. URL: http://christoph-benzmueller.de/papers/W36.pdf.

[129] Mark Buckley and Christoph Benzmüller. "An Agent-based Architecture for Dialogue Systems". In: *Perspectives of Systems Informatics, 6th International Andrei Ershov Memorial Conference, PSI 2006, Novosibirsk, Russia, June 27-30, 2006. Revised Papers*. Ed. by Irina Virbitskaite and Andrei Voronkov. Vol. 4378. LNCS. Springer, 2007, pp. 135–147. ISBN: 978-3-540-70880-3. DOI: 10.1007/978-3-540-70881-0_14. URL: http://christoph-benzmueller.de/papers/C21.pdf.

[130] Marvin Schiller, Dominik Dietrich, and Christoph Benzmüller. "Towards Computer-Assisted Proof Tutoring". In: *JEM Workshop on identifying and supporting (scientific) communities in education and research*. (Mildly reviewed). Jacobs University Bremen, Germany, 2007. URL: http://christoph-benzmueller.de/papers/W38.pdf.

[131] Marc Wagner, Serge Autexier, and Christoph Benzmüller. "PLATO: A Mediator between Text-Editors and Proof Assistance Systems". In: *Electronic Notes in Theoretical Computer Science* 174.2 (2007), pp. 87–107. ISSN: 1571-0661. DOI: 10.1016/j.entcs.2006.09.024. URL: http://christoph-benzmueller.de/papers/J14.pdf.

[132] Serge Autexier et al. "A Generic Modular Data Structure for Proof Attempts Alternating on Ideas and Granularity". In: *Mathematical Knowledge Management, 4th International Conference, MKM 2005, Bremen, Germany, July 15-17, 2005, Revised Selected Papers*. Ed. by Michael Kohlhase. Vol. 3863. LNCS. Springer, 2006, pp. 126–142. DOI: 10.1007/11618027_9. URL: http://christoph-benzmueller.de/papers/C19.pdf.

[133] Christoph Benzmüller. *Cumulative Habilitation Script*. Saarland University, Germany, 2006, pp. 1–357. URL: http://christoph-benzmueller.de/papers/T3.pdf.

[134] Christoph Benzmüller. "Editorial: Towards Computer Aided Mathematics". In: *Journal of Applied Logic* 4.4 (2006). (non-reviewed), pp. 359–365. DOI: 10.1016/j.jal.2005.10.001. URL: http://christoph-benzmueller.de/papers/J13.pdf.

[135] Christoph Benzmüller, ed. *Special Issue on Assistance Systems for Mathematics*. Journal of Applied Logic, Elsevier, 2006. URL: http://www.sciencedirect.com/science/journal/15708683/4/4.

[136] Christoph Benzmüller and Chad Brown. "Semantics of Higher-Order Logic". Course Notes from the 18th European Summer School in Logic, Language and Information (ESSLLI'06). Malaga, Spain, 2006. URL: http://christoph-benzmueller.de/papers/R38.pdf.

[137] Christoph Benzmüller, Chad Brown, and Michael Kohlhase. "Cut-Simulation in Impredicate Logics". In: *Automated Reasoning, Third International Joint Conference, IJCAR 2006, Seattle, WA, USA, August 17-20, 2006, Proceedings*. Ed. by Ulrich Furbach and Natarajan Shankar. Vol. 4130. LNCS. Springer, 2006, pp. 220–234. DOI: 10.1007/11814771_20. URL: http://christoph-benzmueller.de/papers/C23.pdf.

[138] Christoph Benzmüller, Chad Brown, and Michael Kohlhase. *Cut-Simulation in Impredicative Logics (extended version)*. SEKI Report SR-2006-01. Saarland University, Saarbrücken, Germany, 2006. URL: http://christoph-benzmueller.de/papers/R39.pdf.

[139] Christoph Benzmüller, Bernd Fischer, and Geoff Sutcliffe, eds. *Proceedings of the 6th International Workshop on the Implementation of Logics*. Vol. 212. CEUR Workshop Proceedings. CEUR-WS.org, 2006. URL: http://ceur-ws.org/Vol-212/.

[140] Christoph Benzmüller et al. "A corpus of tutorial dialogs on theorem proving; the influence of the presentation of the study-material". In: *Proceedings of International Conference on Language Resources and Evaluation (LREC 2006)*. Genova, Italy: ELDA, 2006. URL: http://christoph-benzmueller.de/papers/C20.pdf.

[141] Christoph Benzmüller et al. "OMEGA". In: *The Seventeen Provers of the World*. Ed. by Freek Wiedijk. LNCS 3600. Springer, 2006, pp. 127–141. ISBN: 978-3-540-30704-4. DOI: 10.1007/11542384_17. URL: http://christoph-benzmueller.de/papers/B3.pdf.

[142] Marvin Schiller and Christoph Benzmüller. "Granularity Judgments in Proof Tutoring". In: *Poster papers at KI 2006: Advances in Artificial Intelligence: 29th Annual German Conference on AI*. Bremen, Germany, 2006. URL: http://christoph-benzmueller.de/papers/W33.pdf.

[143] Marvin Schiller, Christoph Benzmüller, and Ann van de Veire. "Judging Granularity for Automated Mathematics Teaching". In: *Short papers at LPAR 2006: 13th International Conference on Logic for Programming Artificial Intelligence and Reasoning*. Pnom Penh, Cambodia, 2006. URL: http://christoph-benzmueller.de/papers/W34.pdf.

[144] Jörg Siekmann, Christoph Benzmüller, and Serge Autexier. "Computer Supported Mathematics with OMEGA". In: *Journal of Applied Logic* 4.4 (2006), pp. 533–559. DOI: 10.1016/j.jal.2005.10.008. URL: http://christoph-benzmueller.de/papers/J12.pdf.

[145] Frank Theiss and Christoph Benzmüller. "Term Indexing for the LEO-II Prover". In: *IWIL-6 workshop at LPAR 2006: The 6th International Workshop on the Implementation of Logics*. Pnom Penh, Cambodia, 2006. URL: http://christoph-benzmueller.de/papers/W35.pdf.

[146] Serge Autexier et al. "Integrating Proof Assistants as Reasoning and Verification Tools into a Scientific WYSIWYG Editor". This article was formally accepted for the UITP'05 post-proceedings in ENTCS; this volume did not appear though. 2005. URL: http://christoph-benzmueller.de/papers/J10.pdf.

[147] Christoph Benzmüller. "System Description: LEO – A Resolution based Higher-Order Theorem Prover". In: *Proceedings of the LPAR-05 Workshop: Empirically Successfull Automated Reasoning in Higher-Order Logic (ESHOL)*. arXiv:cs/0601042. Wexford Hotel, Montego Bay, Jamaica, 2005, pp. 25–44. URL: http://arxiv.org/abs/cs/0601042.

[148] Christoph Benzmüller and Chad Brown. "A Structured Set of Higher-Order Problems". In: *Theorem Proving in Higher Order Logics, 18th International Conference, TPHOLs 2005, Oxford, UK, August 22-25, 2005, Proceedings*. Ed. by Joe Hurd and Thomas F. Melham. LNCS 3603. Springer, 2005, pp. 66–81. DOI: 10.1007/11541868_5. URL: http://christoph-benzmueller.de/papers/C17.pdf.

[149] Christoph Benzmüller, John Harrison, and Carsten Schürmann, eds. *Proceedings of the LPAR-05 Workshop: Empirically Successfull Automated Reasoning in Higher-Order Logic (ESHOL)*. arXiv:cs/0601042. Wexford Hotel, Montego Bay, Jamaica, 2005. URL: http://arxiv.org/abs/cs/0601042.

[150] Christoph Benzmüller and Bao Quoc Vo. "Mathematical Domain Reasoning Tasks in Natural Language Tutorial Dialog on Proofs". In: *Proceedings, The Twentieth National Conference on Artificial Intelligence and the Seventeenth Innovative Applications of Artificial Intelligence Conference, July 9-13, 2005, Pittsburgh, Pennsylvania, USA*. Ed. by Manuela Veloso and Subbarao Kambhampati. AAAI Press / The MIT Press, 2005, pp. 516–522. URL: http://christoph-benzmueller.de/papers/C18.pdf.

[151] Christoph Benzmüller et al. "Can a Higher-Order and a First-Order Theorem Prover Cooperate?" In: *Logic for Programming, Artificial Intelligence, and Reasoning, 11th International Conference, LPAR 2004, Montevideo, Uruguay, March 14-18, 2005, Proceedings*. Ed. by Franz Baader and Andrei Voronkov. LNCS 3452. Springer, 2005, pp. 415–431. DOI: 10.1007/978-3-540-32275-7_27. URL: http://christoph-benzmueller.de/papers/C16.pdf.

[152] Christoph Benzmüller et al. "Combining Proofs of Higher-Order and First-Order Automated Theorem Provers". In: *Proceedings of the LPAR-05 Workshop: Empirically Successfull Automated Reasoning in Higher-Order Logic (ESHOL)*. arXiv:cs/0601042. Wexford Hotel, Montego Bay, Jamaica, 2005, pp. 45–58. URL: http://arxiv.org/abs/cs/0601042.

[153] Mark Buckley and Christoph Benzmüller. "Integrating Proof Assistants as Reasoning and Verification Tools into a Scientific WYSIWIG Editor". In: *Proceedings of the ETAPS Satellite Workshop on User Interfaces for Theorem Provers (UITP)*. Edinburgh, Scotland, 2005, pp. 16–39. URL: http://christoph-benzmueller.de/papers/W30.pdf.

[154] Mark Buckley and Christoph Benzmüller. "System Description: A Dialog Manager supporting Tutorial Natural Language Dialogue on Proofs". This article was formally accepted for the UITP'05 post-proceedings in ENTCS; this volume did not appear though. 2005. URL: http://christoph-benzmueller.de/papers/J11.pdf.

[155] Mark Buckley and Christoph Benzmüller. "System Description: A Dialog Manager supporting Tutorial Natural Language Dialogue on Proofs". In: *Proceedings of the ETAPS Satellite Workshop on User Interfaces for Theorem Provers (UITP)*. Edinburgh, Scotland, 2005, pp. 40–67. URL: http://christoph-benzmueller.de/papers/W29.pdf.

[156] Serge Autexier et al. "Assertion-level Proof Representation with Under-Specification". In: *Electronic Notes in Theoretical Computer Science* 93 (2004), pp. 5–23. DOI: 10.1016/j.entcs.2003.12.026. URL: http://christoph-benzmueller.de/papers/J8.pdf.

[157] Serge Autexier et al. "VERMATH: Distributed Mathematical Problem Solving". DFG research grant proposal. 2004. URL: http://christoph-benzmueller.de/papers/R33.pdf.

[158] Christoph Benzmüller. "ALONZO: Higher-Order Reasoning Agents and Semantical Mediation of Mathematical Knowledge". DFG research grant proposal. 2004. URL: http://christoph-benzmueller.de/papers/R32.pdf.

[159] Christoph Benzmüller. "ALONZO: Higher-Order Reasoning Agents for Mathematics". EURYI project proposal. 2004. URL: http://christoph-benzmueller.de/papers/R23.pdf.

[160] Christoph Benzmüller, Chad Brown, and Michael Kohlhase. "Higher-Order Semantics and Extensionality". In: *Journal of Symbolic Logic* 69.4 (2004), pp. 1027–1088. DOI: 10.2178/jsl/1102022211. URL: http://christoph-benzmueller.de/papers/J6.pdf.

[161] Christoph Benzmüller and Corinna Hahn. *The CALCULEMUS Final Report*. Final report of the Marie Curie Research Training Network CALCULEMUS within the EU 5th framework. Saarland University, Germany, 2004, pp. 1–57. URL: http://christoph-benzmueller.de/papers/R36.pdf.

[162] Christoph Benzmüller, Michael Kohlhase, and Jörg Siekmann. "Abschlussbericht Projekt HOTEL". DFG research grant report. 2004. URL: http://christoph-benzmueller.de/papers/R34.pdf.

[163] Christoph Benzmüller, Andreas Meier, and Volker Sorge. "Bridging Theorem Proving and Mathematical Knowledge Retrieval". In: *Mechanizing Mathematical Reasoning: Essays in Honor of Jörg Siekmann on the Occasion of His 60th Birthday*. Ed. by Dieter Hutter and Werner Stephan. Vol. 2605. LNCS. Springer, 2004, pp. 277–296. ISBN: 978-3-540-25051-7. DOI: 10.1007/978-3-540-32254-2_17. URL: http://christoph-benzmueller.de/papers/B2.pdf.

[164] Christoph Benzmüller and Wolfgang Windsteiger, eds. *Computer-Supported Mathematical Theory Development*. RISC Report Series 04-14. Proceedings of the first "Workshop on Computer-Supported Mathematical Theory Development" held in the frame of IJCAR 2004 in Cork, Ireland, July 5, 2004. ISBN 3-902276-04-5. RISC Institute, University of Linz. July 2004. URL: http://christoph-benzmueller.de/papers/E6.pdf.

[165] Mark Buckley and Christoph Benzmüller. *A Dialogue Manager for the DIALOG Demonstrator*. SEKI Report SR-04-01. Saarland University, SEKI Publications (ISSN 1437-4447), 2004. URL: http://christoph-benzmueller.de/papers/R35.pdf.

[166] Malte Hübner et al. "Interactive Theorem Proving with Tasks". In: *Electronic Notes in Theoretical Computer Science* 103.C (Nov. 2004), pp. 161–181. DOI: 10.1016/j.entcs.2004.02.021. URL: http://christoph-benzmueller.de/papers/J9.pdf.

[167] Manfred Pinkal, Jörg Siekmann, and Christoph Benzmüller. "DIALOG: Tutorial Dialog with an Assistance System for Mathematics". Project report in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes. 2004. URL: http://christoph-benzmueller.de/papers/R28.pdf.

[168] Manfred Pinkal et al. "DIALOG: Natural Language-based Interaction with a Mathematics Assistance System". Project proposal in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes. 2004. URL: http://christoph-benzmueller.de/papers/R30.pdf.

[169] Jörg Siekmann and Christoph Benzmüller. "OMEGA: Computer Supported Mathematics". In: *KI 2004: Advances in Artificial Intelligence, 27th Annual German Conference on AI, KI 2004, Ulm, Germany, September 20-24, 2004, Proceedings*. Ed. by Susanne Biundo, Thom W. Frühwirth, and Günther Palm. LNCS 3228. Ulm, Germany, 2004, pp. 3–28. DOI: 10.1007/978-3-540-30221-6_2. URL: http://christoph-benzmueller.de/papers/C15.pdf.

[170] Jörg Siekmann, Christoph Benzmüller, and Serge Autexier. "OMEGA: Agent-oriented Proof Planning". Project proposal in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes. 2004. URL: http://christoph-benzmueller.de/papers/R31.pdf.

[171] Jörg Siekmann, Christoph Benzmüller, and Erica Melis. "OMEGA: Resource-adaptive Proof Planning". Project report in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes. 2004. URL: http://christoph-benzmueller.de/papers/R29.pdf.

[172] Magdalena Wolska et al. "An annotated corpus of tutorial dialogs on mathematical theorem proving". In: *Proceedings of International Conference on Language Resources and Evaluation (LREC 2004)*. Lisbon, Portugal: ELDA, 2004. URL: http://christoph-benzmueller.de/papers/C14.pdf.

[173] Serge Autexier and Christoph Benzmüller. "OMEGA — From Proof Planning towards Mathematical Knowledge Management". In: *Mathematical Knowledge Management Symposium*. Heriot-Watt University, Edinburgh, Scotland, 2003. URL: http://christoph-benzmueller.de/papers/W27.pdf.

[174] Serge Autexier, Christoph Benzmüller, and Dieter Hutter. *Towards a Framework to Integrate Proof Search Paradigms*. SEKI Report SR-03-02. Saarland University, SEKI Publications (ISSN 1437-4447), 2003. URL: http://christoph-benzmueller.de/papers/R21.pdf.

[175] Christoph Benzmüller. "ALONZO: Deduktionsagenten höherer Ordnung für Mathematische Assistenzsysteme". Project proposal in the DFG Aktionsplan Informatik. 2003. URL: http://christoph-benzmueller.de/papers/R23.pdf.

[176] Christoph Benzmüller, ed. *Systems for Integrated Computation and Deduction – Interim Report of the CALCULEMUS IHP Network*. 135 pages. SEKI Publications (ISSN 1437-4447), 2003. URL: http://christoph-benzmueller.de/papers/MTR-report-long.pdf.

[177] Christoph Benzmüller. "The CALCULEMUS research training network: A short overview". In: *Proceedings of the 11th Symposium on the Integration of Symbolic Computation and Mechanized Reasoning (CALCULEMUS 2003)*. Rome, Italy: MMIII ARACNE EDITRICE S.R.L. (ISBN 88-7999-545-6), 2003, pp. 1–16. URL: http://christoph-benzmueller.de/papers/W21.pdf.

[178] Christoph Benzmüller. "The CALCULEMUS research training network: A short overview". In: *Proceedings of the First QPQ Workshop on Deductive Software Components at CADE-19*. Miami, USA, 2003, pp. 13–27. URL: http://christoph-benzmueller.de/papers/W22.pdf.

[179] Christoph Benzmüller, Chad Brown, and Michael Kohlhase. *Higher Order Semantics and Extensionality*. Technical Report CMU-01-03. Carnegie Mellon University, Pittsburgh, PA, 2003, pp. 1–74. URL: http://christoph-benzmueller.de/papers/R18.pdf.

[180] Christoph Benzmüller, Chad Brown, and Michael Kohlhase. *Semantic Techniques for Cut-Elimination in Higher Order Logic*. Tech. rep. Saarland University, Saarbrücken, Germany and Carnegie Mellon University, Pittsburgh, USA, 2003. URL: http://christoph-benzmueller.de/papers/R19.pdf.

[181] Christoph Benzmüller and Corinna Hahn, eds. *The CALCULEMUS Midterm Report*. EU Report, Saarland University, Saarbrücken, Germany. Saarland University, Germany, Mar. 2003. URL: http://christoph-benzmueller.de/papers/R22.pdf.

[182] Christoph Benzmüller and Dieter Hutter. *CALCULEMUS-II: Computer-supported Mathematical Knowledge Evolution*. Project proposal for a Marie Curie Research Training Network within the EU 6th framework; 73 pages. Saarland University, Germany, 2003, pp. 1–73. URL: http://christoph-benzmueller.de/papers/R24.pdf.

[183] Christoph Benzmüller et al. "A Wizard of Oz Experiment for Tutorial Dialogues in Mathematics". In: *Proceedings of AI in Education (AIED 2003) Workshop on Advanced Technologies for Mathematics Education*. Sydney, Australia, 2003. URL: http://christoph-benzmueller.de/papers/W23.pdf.

[184] Christoph Benzmüller et al. "Language Phenomena in Tutorial Dialogs on Mathematical Proofs". In: *Proceedings of the 7th Workshop on the semantics and pragmatics of dialogue (DiaBruck)*. Wallerfangen, Germany, 2003. URL: http://christoph-benzmueller.de/papers/W25.pdf.

[185] Christoph Benzmüller et al. "Towards a Principled Approach to Tutoring Mathematical Proofs". In: *Proceedings of the Workshop on Expressive Media and Intelligent Tools for Learning, German Conference on AI (KI 2003)*. Hamburg, Germany, 2003. URL: http://christoph-benzmueller.de/papers/W26.pdf.

[186] Christoph Benzmüller et al. "Tutorial Dialogs on Mathematical Proofs". In: *Proceedings of IJCAI-03 Workshop on Knowledge Representation and Automated Reasoning for E-Learning Systems*. Acapulco, Mexico, 2003, pp. 12–22. URL: http://christoph-benzmueller.de/papers/W20.pdf.

[187] Malte Hübner et al. "Interactive Proof Construction at the Task Level". In: *Proceedings of the Workshop User Interfaces for Theorem Provers (UITP 2003)*. Also available as: Technical Report No. 189, Institut für Informatik, Albert-Ludwig-Universität, Freiburg. Rome, Italy: ARACNE EDITRICE S.R.L. (ISBN 88-7999-545-6), 2003, pp. 81–100. URL: http://christoph-benzmueller.de/papers/W24.pdf.

[188] Mateja Jamnik et al. "Automatic Learning of Proof Methods in Proof Planning". In: *The Logic Journal of the IGPL* 11.6 (2003), pp. 647–674. DOI: 10.1093/jigpal/11.6.647. URL: http://christoph-benzmueller.de/papers/J7.pdf.

[189] Jörg Siekmann et al. "Proof Development in OMEGA: The Irrationality of Square Root of 2". In: *Thirty Five Years of Automating Mathematics*. Ed. by Fairouz Kamareddine. Applied Logic series (28). Kluwer Academic Publishers, 2003, pp. 271–314. ISBN: 978-1-402-01656-1. DOI: 10.1007/978-94-017-0253-9_11. URL: http://christoph-benzmueller.de/papers/B1.pdf.

[190] Bao Quoc Vo, Christoph Benzmüller, and Serge Autexier. *An Approach to Assertion Application via Generalized Resolution*. SEKI Report SR-03-01. Saarland University, SEKI Publications (ISSN 1437-4447), 2003. URL: http://christoph-benzmueller.de/papers/R20.pdf.

[191] Bao Quoc Vo, Christoph Benzmüller, and Serge Autexier. "Assertion Application in Theorem Proving and Proof Planning". In: *Proceedings of the 10th Workshop on Automated Reasoning: Bridging the Gap between Theory and Practice*. Liverpool, England, 2003. URL: http://christoph-benzmueller.de/papers/W19.pdf.

[192] Quoc Bao Vo, Christoph Benzmüller, and Serge Autexier. "Assertion Application in Theorem Proving and Proof Planning". In: *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*. Ed. by G. Gottlob and T. Walsh. ISBN 0-127-05661-0. Acapulco, Mexico, 2003. URL: http://christoph-benzmueller.de/papers/C13.pdf.

[193] Christoph Benzmüller. *A remark on higher order RUE-resolution with EXTRUE*. SEKI Report SR-02-05. arXiv:0901.3608. Saarland University, SEKI Publications (ISSN 1437-4447), 2002, pp. 1–5. URL: http://arxiv.org/abs/0901.3608.

[194] Christoph Benzmüller. "Comparing Approaches to Resolution based Higher-Order Theorem Proving". In: *Synthese* 133.1-2 (2002), pp. 203–235. ISSN: 0039-7857. DOI: 10.1023/A:1020840027781. URL: http://christoph-benzmueller.de/papers/J5.pdf.

[195] Christoph Benzmüller and Regine Endsuleit, eds. *CALCULEMUS Autumn School 2002: Course Notes (Part I)*. SR-02-07. (168 pages). SEKI Publications (ISSN 1437-4447), 2002, pp. 1–168. URL: http://christoph-benzmueller.de/papers/E2.pdf.

[196] Christoph Benzmüller and Regine Endsuleit, eds. *CALCULEMUS Autumn School 2002: Course Notes (Part II)*. SR-02-08. (130 pages). SEKI Publications (ISSN 1437-4447), 2002, pp. 1–130. URL: http://christoph-benzmueller.de/papers/E3.pdf.

[197] Christoph Benzmüller and Regine Endsuleit, eds. *CALCULEMUS Autumn School 2002: Course Notes (Part III)*. SR-02-09. 121 pages. SEKI Publications (ISSN 1437-4447), 2002. URL: http://christoph-benzmueller.de/papers/E4.pdf.

[198] Christoph Benzmüller, Corrado Giromini, and Andreas Nonnengart. "Symbolic Verification of Hybrid Systems supported by Mathematical Services". In: *Additonal Proceedings of 10th Symposium on the Integration of Symbolic Computation and Mechanized Reasoning (CALCULEMUS 2002)*. Marseilles, France, 2002, pp. 1–10. URL: http://christoph-benzmueller.de/papers/W17.pdf.

[199] Christoph Benzmüller and Volker Sorge. "Agent-based Theorem Proving". In: *Proceedings of the 9th Workshop on Automated Reasoning: Bridging the Gap between Theory and Practice*. London, England, 2002, pp. 1–3. URL: http://christoph-benzmueller.de/papers/W15.pdf.

[200] Christoph Benzmüller et al. *Irrationality of square root of 2 – A case study in OMEGA*. SEKI Report SR-02-03. Saarland University, SEKI Publications (ISSN 1437-4447), 2002, pp. 1–103. URL: http://christoph-benzmueller.de/papers/R15.pdf.

[201] Christoph Benzmüller et al. "Reasoning Services in the MathWeb-SB for Symbolic Verification of Hybrid Systems". In: *Proceedings of the Verification Workshop - VERIFY'02 in connection with FLOC 2002*. Kopenhagen, Denmark, 2002, pp. 29–39. URL: http://christoph-benzmueller.de/papers/W18.pdf.

[202] Malte Hübner, Serge Autexier, and Christoph Benzmüller. "Agent-based Proof Search with Indexed Formulas". In: *Additonal Proceedings of 10th Symposium on the Integration of Symbolic Computation and Mechanized Reasoning (CALCULEMUS 2002)*. Marseilles, France, 2002, pp. 11–20. URL: http://christoph-benzmueller.de/papers/W16.pdf.

[203] Mateja Jamnik et al. *Automatic Learning of Proof Methods in Proof Planning*. Tech. rep. CSRP-02-05. University of Birmingham, School of Computer Science, 2002, pp. 1–34. URL: http://christoph-benzmueller.de/papers/R16.pdf.

[204] Mateja Jamnik et al. "Automatic Learning of Proof Methods in Proof Planning". In: *Proceedings of the 9th Workshop on Automated Reasoning: Bridging the Gap between Theory and Practice*. London, England, 2002, pp. 1–2. URL: http://christoph-benzmueller.de/papers/W28.pdf.

[205] Jörg Siekmann et al. "Proof Development with OMEGA". In: *Proceedings of the 18th International Conference on Automated Deduction (CADE-18)*. Ed. by Andrei Voronkov. LNCS 2392. Copenhagen, Denmark: Springer, 2002, pp. 144–149. ISBN: 3540439315. DOI: 10.1007/3-540-45620-1_12. URL: http://christoph-benzmueller.de/papers/C11.pdf.

[206] Jörg Siekmann et al. “Proof Development with OMEGA: Sqrt(2) is irrational”. In: *Logic for Programming, Artificial Intelligence, and Reasoning, 9th International Conference, LPAR 2002*. Ed. by Matthias Baaz and Andrei Voronkov. LNCS 2514. Springer, 2002, pp. 367–387. ISBN: 3540000100. URL: http://christoph-benzmueller.de/papers/C12.pdf.

[207] Jürgen Zimmer and Christoph Benzmüller, eds. *CALCULEMUS Autumn School 2002: Student Poster Abstracts*. SR-02-06. (115 pages). SEKI Publications (ISSN 1437-4447), 2002, pp. 1–116. URL: http://christoph-benzmueller.de/papers/E1.pdf.

[208] Christoph Benzmüller. “An Agent Based Approach to Reasoning”. In: *Extended abstract for invited plenary talk at AISB’01 Convention ‘Agents and Cognition*. University of York, 2001, pp. 57–58. URL: http://christoph-benzmueller.de/papers/W10.pdf.

[209] Christoph Benzmüller and Manfred Kerber. “A Lost Proof”. In: *Proceedings of the IJCAR 2001 Workshop: Future Directions in Automated Reasoning*. Siena, Italy, 2001, pp. 13–24. URL: http://christoph-benzmueller.de/papers/W13.pdf.

[210] Christoph Benzmüller, Andreas Meier, and Volker Sorge. “Distributed Assertion Retrieval”. In: *First International Workshop on Mathematical Knowledge Management*. RISC Linz, Schloss Hagenberg, 2001, pp. 1–7. URL: http://christoph-benzmueller.de/papers/W14.pdf.

[211] Christoph Benzmüller and Volker Sorge. “OANTS – Combining Interactive and Automated Theorem Proving”. In: *Symbolic Computation and Automated Reasoning*. Ed. by Manfred Kerber and Michael Kohlhase. A.K.Peters, 2001, pp. 81–97. URL: http://christoph-benzmueller.de/papers/C8.pdf.

[212] Christoph Benzmüller et al. “An Agent-oriented Approach to Reasoning”. In: *Proceedings of the Calculemus Workshop 2001*. Siena, Italy, 2001, pp. 48–63. URL: http://christoph-benzmueller.de/papers/W11.pdf.

[213] Christoph Benzmüller et al. “Experiments with an Agent-oriented Reasoning system”. In: *KI 2001: Advances in Artificial Intelligence, Joint German/Austrian Conference on AI, Vienna, Austria, September 19-21, 2001, Proceedings*. Ed. by Franz Baader, Gerhard Brewka, and Thomas Eiter. LNCS 2174. Springer, 2001, pp. 409–424. DOI: 10.1007/3-540-45422-5_29. URL: http://christoph-benzmueller.de/papers/C10.pdf.

[214] Christoph Benzmüller et al. “Proof Planning: A Fresh Start?” In: *Proceedings of the IJCAR 2001 Workshop: Future Directions in Automated Reasoning*. Siena, Italy, 2001, pp. 25–37. URL: http://christoph-benzmueller.de/papers/W12.pdf.

[215] Christoph Benzmüller et al. “Proof transformation and expansion with a parameterisable inference machine.” In: *Proceedings of the Eighth Workshop on Automated Reasoning, Bridging the Gap between Theory and Practice*. (Mildly reviewed). University of York, 2001, pp. 1–2. URL: http://christoph-benzmueller.de/papers/W9.pdf.

[216] Mateja Jamnik, Manfred Kerber, and Christoph Benzmüller. *Learning Method Outlines in Proof Planning*. Tech. rep. CSRP-01-08. University of Birmingham, School of Computer Science, 2001, pp. 1–15. URL: http://christoph-benzmueller.de/papers/R14.pdf.

[217] Mateja Jamnik, Manfred Kerber, and Christoph Benzmüller. “Learning proof methods in proof planning”. In: *Proceedings of the Eighth Workshop on Automated Reasoning, Bridging the Gap between Theory and Practice*. (Mildly reviewed). University of York, 2001, pp. 5–6. URL: http://christoph-benzmueller.de/papers/W8.pdf.

[218] Mateja Jamnik, Manfred Kerber, and Christoph Benzmüller. “Towards Learning New Methods in Proof Planning”. In: *Proceedings of the CADE-17 Workshop: Automated Deduction in the Context of Mathematics*. 2001, pp. 1–12. URL: http://christoph-benzmueller.de/papers/W6.pdf.

[219] Manfred Pinkal, Jörg Siekmann, and Christoph Benzmüller. “DIALOG: Tutorieller Dialog mit einem Mathematik Assistenzsystem”. Project proposal in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes. 2001. URL: http://christoph-benzmueller.de/papers/R25.pdf.

[220] Jörg Siekmann, Christoph Benzmüller, and Erica Melis. “OMEGA: Ressourcenadaptive Beweisplanung”. Project proposal in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes. 2001. URL: http://christoph-benzmueller.de/papers/R25.pdf.

[221] Christoph Benzmüller et al. “Resource Guided Concurrent Deduction”. In: *Symbolic Computation and Automated Reasoning*. Ed. by Manfred Kerber and Michael Kohlhase. A.K.Peters, 2000, pp. 245–246. URL: http://christoph-benzmueller.de/papers/C7.pdf.

[222] Christoph Benzmüller et al. “Resource Guided Concurrent Deduction”. In: *Proceedings of the AISB’2000 Symposium ‘How to design a functioning mind’*. (Mildly reviewed). Birmingham, England, 2000, pp. 137–138. URL: http://christoph-benzmueller.de/papers/W7.pdf.

[223] Mateja Jamnik, Manfred Kerber, and Christoph Benzmüller. “Towards Learning New Methods in Proof Planning”. In: *Symbolic Computation and Automated Reasoning*. Ed. by Manfred Kerber and Michael Kohlhase. A.K.Peters, 2000, pp. 142–159. URL: http://christoph-benzmueller.de/papers/C9.pdf.

[224] Mateja Jamnik, Manfred Kerber, and Christoph Benzmüller. *Towards Learning new Methods in Proof Planning*. Tech. rep. CSRP-00-09. University of Birmingham, School of Computer Science, 2000, pp. 1–16. URL: http://christoph-benzmueller.de/papers/R13.pdf.

[225] Jörg Siekmann et al. “Adaptive Course Generation and Presentation”. In: *Proceedings of the Fifth International Conference on Intelligent Tutoring Systems—Workshop W2: Adaptive and Intelligent Web-Based Education Systems*. Ed. by P. Brusilovski. Montreal, 2000, pp. 54–61. URL: http://christoph-benzmueller.de/papers/W5.pdf.

[226] Christoph Benzmüller. *Equality and Extensionality in Higher-Order Theorem Proving*. SEKI Report SR-99-08. Saarland University, SEKI Publications (ISSN 1437-4447), 1999, pp. 1–139. URL: http://christoph-benzmueller.de/papers/R11.pdf.

[227] Christoph Benzmüller. “Equality and Extensionality in Higher-Order Theorem Proving”. PhD thesis. Naturwissenschaftlich-Technische Fakultät I, Saarland University, Saarbrücken, Germany, 1999, pp. 1–174. URL: http://christoph-benzmueller.de/papers/T2.pdf.

[228] Christoph Benzmüller. “Extensional Higher-Order Paramodulation and RUE-Resolution”. In: *Automated Deduction - CADE-16, 16th International Conference on Automated Deduction, Trento, Italy, July 7-10, 1999, Proceedings*. Ed. by Harald Ganzinger. LNCS 1632. Springer, 1999, pp. 399–413. DOI: 10.1007/3-540-48660-7_39. URL: http://christoph-benzmueller.de/papers/C5.pdf.

[229] Christoph Benzmüller. “Forschungsinteressen am Graduiertenkolleg Kognitionswissenschaft”. Draft, AG Siekmann, Saarland University. 1999. URL: http://christoph-benzmueller.de/papers/R8.pdf.

[230] Christoph Benzmüller, Matt Bishop, and Volker Sorge. “Integrating TPS and OMEGA”. In: *Journal of Universal Computer Science* 5.3 (1999), pp. 188–207. DOI: 10.3217/jucs-005-03-0188. URL: http://christoph-benzmueller.de/papers/J1.pdf.

[231] Christoph Benzmüller and Volker Sorge. “Critical Agents Supporting Interactive Theorem Proving”. In: *Progress in Artificial Intelligence, 9th Portuguese Conference on Artificial Intelligence, EPIA ’99, Évora, Portugal, September 21-24, 1999, Proceedings*. Ed. by Pedro Borahona and Jose J. Alferes. LNCS 1695. Springer, 1999, pp. 208–221. DOI: 10.1007/3-540-48159-1_15. URL: http://christoph-benzmueller.de/papers/C6.pdf.

[232] Christoph Benzmüller and Volker Sorge. *Resource Adaptive Agents in Interactive Theorem Proving*. SEKI Report SR-99-02. Saarland University, SEKI Publications (ISSN 1437-4447), 1999, pp. 1–13. URL: http://arxiv.org/abs/0901.3585.

[233] Christoph Benzmüller and Volker Sorge. “Towards Fine-Grained Proof Planning with Critical Agents”. In: *Proceedings of the 6th Workshop on Automated Reasoning*. (Mildly reviewed). Edinburgh College of Art & Divison of Informatics, University of Edinburgh, 1999, pp. 19–20. URL: http://christoph-benzmueller.de/papers/W3.pdf.

[234] Christoph Benzmüller, Volker Sorge, and John Byrnes. “OANTS for Interactive ATP”. Draft, AG Siekmann, Saarland University. 1999. URL: http://christoph-benzmueller.de/papers/R12.pdf.

[235] Christoph Benzmüller et al. “Agent Based Mathematical Reasoning”. In: *Proceedings of the Calculemus Workshop: Systems for Integrated Computation and Deduction*. Trento, Italy, July 1999, pp. 1–12. URL: http://christoph-benzmueller.de/papers/W4.pdf.

[236] Christoph Benzmüller et al. “Agent based Mathematical Reasoning”. In: *Electronic Notes in Theoretical Computer Science, Elsevier* 23.3 (1999), pp. 21–33. DOI: 10.1016/S1571-0661(05)82522-8. URL: http://christoph-benzmueller.de/papers/J4.pdf.

[237] Christoph Benzmüller et al. *Towards Concurrent Resource Guided Deduction*. SEKI Report SR-99-07. Saarland University, SEKI Publications (ISSN 1437-4447), 1999, pp. 1–27. URL: http://christoph-benzmueller.de/papers/R10.pdf.

[238] Jörg Siekmann et al. “An Interactive Proof Development Environment + Anticipation = A Mathematical Assistant?” In: *International Journal of Computing Anticipatory Systems (CASYS)* 3 (1999), pp. 101–110. ISSN: 1373-5411. URL: http://christoph-benzmueller.de/papers/J3.pdf.

[239] Jörg Siekmann et al. “LOUI: Lovely OMEGA User Interface”. In: *Formal Aspects of Computing* 11.3 (1999), pp. 326–342. DOI: 10.1007/s001650050053. URL: http://christoph-benzmueller.de/papers/J2.pdf.

[240] Christoph Benzmüller. *An Adaptation of Paramodulation and RUE-Resolution to Higher-Order Logic*. SEKI Report SR-98-07. Saarland University, SEKI Publications (ISSN 1437-4447), 1998, pp. 1–55. URL: http://christoph-benzmueller.de/papers/R7.pdf.

[241] Christoph Benzmüller and Michael Kohlhase. “Extensional Higher-Order Resolution”. In: *Automated Deduction - CADE-15, 15th International Conference on Automated Deduction, Lindau, Germany, July 5-10, 1998, Proceedings*. Ed. by Claude Kirchner and Hélène Kirchner. LNAI 1421. Springer, 1998, pp. 56–71. DOI: 10.1007/BFb0054248. URL: http://christoph-benzmueller.de/papers/C2.pdf.

[242] Christoph Benzmüller and Michael Kohlhase. “LEO – A Higher-Order Theorem Prover”. In: *Automated Deduction - CADE-15, 15th International Conference on Automated Deduction, Lindau, Germany, July 5-10, 1998, Proceedings*. Ed. by Claude Kirchner and Hélène Kirchner. LNCS 1421. Springer, 1998, pp. 139–143. DOI: 10.1007/BFb0054256. URL: http://christoph-benzmueller.de/papers/C3.pdf.

[243] Christoph Benzmüller and Volker Sorge. “A Blackboard Architecture for Guiding Interactive Proofs”. In: *Artificial Intelligence: Methodology, Systems, and Applications, 8th International Conference, AIMSA ’98, Sozopol, Bulgaria, September 21-13, 1998, Proceedings*. Ed. by Fausto Giunchiglia. LNCS 1480. Springer, 1998, pp. 102–114. DOI: 10.1007/BFb0057438. URL: http://christoph-benzmueller.de/papers/C4.pdf.

[244] Christoph Benzmüller and Volker Sorge. “Integrating TPS with OMEGA”. In: *Theorem Proving in Higher Order Logics: Emerging Trends*. Ed. by Jim Grundy and Malcolm Newey. Technical Report 98-08, Department of Computer Science and Computer Science Lab, The Australian National University. Canberra, Australia, Oct. 1998, pp. 1–18. URL: http://christoph-benzmueller.de/papers/W2.pdf.

[245] Jörg Siekmann et al. “A Distributed Graphical User Interface for the Interactive Proof System”. In: *Proceedings of the International Workshop ”User Interfaces for Theorem Provers 1998 (UITP’98)*. Eindhoven, Netherlands, 1998, pp. 130–138. URL: http://christoph-benzmueller.de/papers/W1.pdf.

[246] Christoph Benzmüller. *A Calculus and a System Architecture for Extensional Higher-Order Resolution*. Research Report 97-198. Department of Mathematical Sciences, Carnegie Mellon University, Pittsburgh, USA, 1997, pp. 1–28. URL: http://christoph-benzmueller.de/papers/R4.pdf.

[247] Christoph Benzmüller and Michael Kohlhase. *Henkin Completeness of Higher-Order Resolution*. SEKI Report SR-97-10. Saarland University, SEKI Publications (ISSN 1437-4447), 1997, pp. 1–12. URL: http://christoph-benzmueller.de/papers/R6.pdf.

[248] Christoph Benzmüller and Michael Kohlhase. *Model Existence for Higher-Order Logic*. SEKI Report SR-97-09. Saarland University, SEKI Publications (ISSN 1437-4447), 1997, pp. 1–34. URL: http://christoph-benzmueller.de/papers/R5.pdf.

[249] Christoph Benzmüller et al. “OMEGA: Towards a mathematical assistant”. In: *Automated Deduction - CADE-14, 14th International Conference on Automated Deduction, Townsville, North Queensland, Australia, July 13-17, 1997, Proceedings*. Ed. by William McCune. LNCS 1249. Springer, 1997, pp. 252–255. DOI: 10.1007/3-540-63104-6_23. URL: http://christoph-benzmueller.de/papers/C1.pdf.

[250] Christoph Benzmüller. “Proposal for my PhD-Study”. Draft, AG Siekmann, Saarland University. 1995. URL: http://christoph-benzmueller.de/papers/R3.pdf.

[251] Christoph Benzmüller. “Eine Fallstudie zur Spezifikation von Systemanforderungen in der Spezifikationssprache OBSCURE”. MA thesis. Department of Computer Science, Saarland University, Germany, 1994, pp. 1–194. URL: http://christoph-benzmueller.de/papers/T1.pdf.

[252] Christoph Benzmüller. *HDMS–A und OBSCURE in KORSO— Die Funktionale Essenz von HDMS–A aus Sicht der algorithmischen Spezifikationsmethode — TEIL 3: Spezifikation der atomaren Funktionen*. Technischer Bericht A/06/93. Saarland University, SEKI Publications (ISSN 1437-4447), 1993, pp. 1–59. URL: http://christoph-benzmueller.de/papers/R2.pdf.

[253] Serge Autexier, Christoph Benzmüller, and Ramses A. Heckler. *Das Fallbeispiel ‘UNIX’ — Dokumentation einer UNIX-Filesystem-Spezifikation mit OWEB*. Working Paper WP 92/36. Saarland University, SEKI Publications (ISSN 1437-4447), July 1992. URL: http://christoph-benzmueller.de/papers/R1.pdf.