
LIST OF PUBLICATIONS

NAME: Benzmüller, Christoph

NOTE: see also <http://christoph-benzmueller.de/cv-texmacs/cv-publications.html>

JOURNALS

- [J01-99] Christoph Benzmüller, Matt Bishop, and Volker Sorge. Integrating TPS and OMEGA. *Journal of Universal Computer Science*, 5(3):188–207, 1999. doi:10.3217/jucs-005-03-0188.
- [J02-99] Jörg Siekmann, Stephan Hess, Christoph Benzmüller, Lassaad Cheikhrouhou, Armin Fiedler, Helmut Horacek, Michael Kohlhase, Karsten Konrad, Andreas Meier, Erica Melis, Martin Pollet, and Volker Sorge. LOUI: Lovely OMEGA user interface. *Formal Aspects of Computing*, 11:326–342, 1999. doi:10.1016/S1571-0661(05)82522-8.
- [J03-99] Jörg Siekmann, Helmut Horacek, Michael Kohlhase, Christoph Benzmüller, Lassaad Cheikhrouhou, Detlef Fehrer, Armin Fiedler, Stephan Hess, Karsten Konrad, Andreas Meier, Erica Melis, and Volker Sorge. An interactive proof development environment + anticipation = a mathematical assistant? *International Journal of Computing Anticipatory Systems (CASYS)*, 3:101–110, 1999.
- [J04-99] Christoph Benzmüller, Mateja Jamnik, Manfred Kerber, and Volker Sorge. Agent based mathematical reasoning. *Electronic Notes in Theoretical Computer Science, Elsevier*, 23(3):21–33, 1999. doi:10.1016/S1571-0661(05)82522-8.
- [J05-02] Christoph Benzmüller. Comparing approaches to resolution based higher-order theorem proving. *Synthese*, 133(1-2):203–235, 2002. doi:10.1023/A:1020840027781.
- [J06-04] Christoph Benzmüller, Chad Brown, and Michael Kohlhase. Higher-order semantics and extensionality. *Journal of Symbolic Logic*, 69(4):1027–1088, 2004. doi:10.2178/jsl/1102022211.
- [J07-03] Mateja Jamnik, Manfred Kerber, Martin Pollet, and Christoph Benzmüller. Automatic learning of proof methods in proof planning. *The Logic Journal of the IGPL*, 11(6):647–674, 2003. doi:10.1093/jigpal/11.6.647.
- [J08-04] Serge Autexier, Christoph Benzmüller, Armin Fiedler, Helmut Horacek, and Bao Quoc Vo. Assertion-level proof representation with under-specification. *Electronic Notes in Theoretical Computer Science*, 93:5–23, 2004. doi:10.1016/j.entcs.2003.12.026.
- [J09-04] Malte Hübner, Serge Autexier, Christoph Benzmüller, and Andreas Meier. Interactive theorem proving with tasks. *Electronic Notes in Theoretical Computer Science*, 103(C):161–181, November 2004. doi:10.1016/j.entcs.2004.02.021.
- [J10-05] Serge Autexier, Christoph Benzmüller, Armin Fiedler, and Henri Lesourd. Integrating proof assistants as reasoning and verification tools into a scientific wysiwyg editor. *Electronic Notes in Theoretical Computer Science*, 2005. This article was formally accepted for the UITP’05 post-proceedings in ENTCS; this volume did still not appear though.
- [J11-05] Mark Buckley and Christoph Benzmüller. System description: A dialog manager supporting tutorial natural language dialogue on proofs. *Electronic Notes in Theoretical Computer Science*, 2005. This article was formally accepted for the UITP’05 post-proceedings in ENTCS; this volume did still not appear though.
- [J12-06] Jörg Siekmann, Christoph Benzmüller, and Serge Autexier. Computer supported mathematics with OMEGA. *Journal of Applied Logic*, 4(4):533–559, 2006. doi:10.1016/j.jal.2005.10.001.
- [J13-06] Christoph Benzmüller. Editorial: Towards computer aided mathematics. *Journal of Applied Logic*, 4(4):359–365, 2006. doi:10.1016/j.jal.2005.10.001.
- [J14-07] Marc Wagner, Serge Autexier, and Christoph Benzmüller. Plato: A mediator between text-editors and proof assistance systems. *Electronic Notes in Theoretical Computer Science*, 174(2):87–107, 2007. doi:10.1016/j.entcs.2006.09.024.

-
- [J15-07] Serge Autexier and Christoph Benzmüller. Preface: Proceedings of the 7th workshop on user interfaces for theorem provers (UITP 2006). *Electronic Notes in Theoretical Computer Science*, 174(2):1–2, 2007. doi:10.1016/j.entcs.2006.09.017.
- [J16-08] Christoph Benzmüller, Volker Sorge, Mateja Jamnik, and Manfred Kerber. Combined reasoning by automated cooperation. *Journal of Applied Logic*, 6(3):318–342, 2008. doi:10.1016/j.jal.2007.06.003.
- [J17-08] Serge Autexier, Christoph Benzmüller, Dominik Dietrich, and Mark Wagner. Organisation, transformation, and propagation of mathematical knowledge in omega. *Mathematics in Computer Science*, 2(2):253–277, 2008. doi:10.1007/s11786-008-0054-6.
- [J18-09] Christoph Benzmüller, Chad Brown, and Michael Kohlhase. Cut-simulation and impredicativity. *Logical Methods in Computer Science*, 5(1:6):1–21, 2009. doi:10.2168/LMCS-5(1:6)2009.
- [J19-08] Marvin Schiller, Dominik Dietrich, and Christoph Benzmüller. Proof step analysis for proof tutoring – a learning approach to granularity. *Teaching Mathematics and Computer Science*, 6(2):325–343, 2008.
- [J20-09] Serge Autexier and Christoph Benzmüller. Preface: Proceedings of the 8th workshop on user interfaces for theorem provers (UITP 2008). *Electronic Notes in Theoretical Computer Science*, 226(1):1–2, 2009. doi:10.1016/j.entcs.2008.12.093.
- [J21-10] Christoph Benzmüller and Lawrence C. Paulson. Multimodal and intuitionistic logics in simple type theory. *The Logic Journal of the IGPL*, 18(6):881–892, 2010. doi:10.1093/jigpal/jzp080.
- [J22-10] Geoff Sutcliffe and Christoph Benzmüller. Automated reasoning in higher-order logic using the TPTP THF infrastructure. *Journal of Formalized Reasoning*, 3(1):1–27, 2010.
- [J23-13] Christoph Benzmüller and Lawrence C. Paulson. Quantified multimodal logics in simple type theory. *Logica Universalis (Special Issue on Multimodal Logics)*, 7(1):7–20, 2013. doi:10.1007/s11787-012-0052-y.
- [J24-13] Adam Pease and Christoph Benzmüller. Sigma: An integrated development environment for formal ontology. *AI Communications (Special Issue on Intelligent Engineering Techniques for Knowledge Bases)*, 26(1):79–97, 2013. doi:10.3233/AIC-120549.
- [J25-11] Christoph Benzmüller. Combining and automating classical and non-classical logics in classical higher-order logic. *Annals of Mathematics and Artificial Intelligence (Special issue Computational logics in Multi-agent Systems (CLIMA XI))*, 62(1-2):103–128, 2011. doi:10.1007/s10472-011-9249-7.
- [J26-12] Christoph Benzmüller, Dov Gabbay, Valerio Genovese, and Daniele Rispoli. Embedding and automating conditional logics in classical higher-order logic. *Annals of Mathematics and Artificial Intelligence*, 66(1-4):257–271, 2012. doi:10.1007/s10472-012-9320-z.
- [J27-12] Christoph Benzmüller and Adam Pease. Higher-order aspects and context in SUMO. *Journal of Web Semantics (Special Issue on Reasoning with context in the Semantic Web)*, 12-13:104–117, 2012. doi:10.1016/j.websem.2011.11.008.

CONFERENCE PAPERS

- [C01-97] Christoph Benzmüller, Lassaad Cheikhrouhou, Detlef Fehrer, Armin Fiedler, Xiaorong Huang, Manfred Kerber, Michael Kohlhase, Karsten Konrad, Erica Melis, Andreas Meier, Wolf Schaarschmidt, Jörg Siekmann, and Volker Sorge. OMEGA: Towards a mathematical assistant. In William McCune, ed., *Automated Deduction - CADE-14, 14th International Conference on Automated Deduction, Townsville, North Queensland, Australia, July 13-17, 1997, Proceedings*, no.1249 in LNCS, pp.252–255. Springer, 1997.
- [C02-98] Christoph Benzmüller and Michael Kohlhase. Extensional higher-order resolution. In Claude Kirchner and Hélène Kirchner, eds., *Automated Deduction - CADE-15, 15th International Conference on Automated Deduction, Lindau, Germany, July 5-10, 1998, Proceedings*, no.1421 in LNAI, pp.56–71. Springer, 1998.
- [C03-98] Christoph Benzmüller and Michael Kohlhase. LEO – a higher-order theorem prover. In Claude Kirchner and Hélène Kirchner, eds., *Automated Deduction - CADE-15, 15th International Conference on Automated Deduction, Lindau, Germany, July 5-10, 1998, Proceedings*, no.1421 in LNCS, pp.139–143. Springer, 1998.

-
- [C04-98] Christoph Benzmüller and Volker Sorge. A blackboard architecture for guiding interactive proofs. In Fausto Giunchiglia, ed., *Artificial Intelligence: Methodology, Systems, and Applications, 8th International Conference, AIMS '98, Sozopol, Bulgaria, September 21-13, 1998, Proceedings*, no.1480 in LNCS, pp.102–114. Springer, 1998.
- [C05-99] Christoph Benzmüller. Extensional higher-order paramodulation and RUE-resolution. In Harald Ganzinger, ed., *Automated Deduction - CADE-16, 16th International Conference on Automated Deduction, Trento, Italy, July 7-10, 1999, Proceedings*, no.1632 in LNCS, pp.399–413. Springer, 1999.
- [C06-99] Christoph Benzmüller and Volker Sorge. Critical agents supporting interactive theorem proving. In Pedro Borahona and Jose J. Alferes, eds., *Progress in Artificial Intelligence, 9th Portuguese Conference on Artificial Intelligence, EPIA '99, Évora, Portugal, September 21-24, 1999, Proceedings*, no.1695 in LNCS, pp.208–221. Springer, 1999.
- [C07-00] Christoph Benzmüller, Mateja Jamnik, Manfred Kerber, and Volker Sorge. Resource guided concurrent deduction. In Manfred Kerber and Michael Kohlhase, eds., *Symbolic Computation and Automated Reasoning*, pp.245–246. A.K.Peters, 2000.
- [C08-00] Christoph Benzmüller and Volker Sorge. OANTS – an open approach at combining interactive and automated theorem proving. In Manfred Kerber and Michael Kohlhase, eds., *Symbolic Computation and Automated Reasoning*, pp.81–97. A.K.Peters, 2000.
- [C09-00] Mateja Jamnik, Manfred Kerber, and Christoph Benzmüller. Towards learning new methods in proof planning. In Manfred Kerber and Michael Kohlhase, eds., *Symbolic Computation and Automated Reasoning*, pp.142–159. A.K.Peters, 2000.
- [C10-01] Christoph Benzmüller, Mateja Jamnik, Manfred Kerber, and Volker Sorge. Experiments with an agent-oriented reasoning system. In Franz Baader, Gerhard Brewka, and Thomas Eiter, eds., *KI 2001: Advances in Artificial Intelligence, Joint German/Austrian Conference on AI, Vienna, Austria, September 19-21, 2001, Proceedings*, no.2174 in LNCS, pp.409–424. Springer, 2001.
- [C11-02] Jörg Siekmann, Christoph Benzmüller, Vladimir Brezhnev, Lassaad Cheikhrouhou, Armin Fiedler, Andreas Franke, Helmut Horacek, Michael Kohlhase, Andreas Meier, Erica Melis, Markus Moschner, Immanuel Normann, Martin Pollet, Volker Sorge, Carsten Ullrich, Claus-Peter Wirth, and Jürgen Zimmer. Proof development with OMEGA. In Andrei Voronkov, ed., *Proceedings of the 18th International Conference on Automated Deduction (CADE-18)*, no.2392 in LNCS, pp.144–149, Copenhagen, Denmark, 2002. Springer.
- [C12-02] Jörg Siekmann, Christoph Benzmüller, Armin Fiedler, Andreas Meier, and Martin Pollet. Proof development with OMEGA: $\sqrt{2}$ is irrational. In Matthias Baaz and Andrei Voronkov, eds., *Logic for Programming, Artificial Intelligence, and Reasoning, 9th International Conference, LPAR 2002*, no.2514 in LNCS, pp.367–387. Springer, 2002.
- [C13-03] Quoc Bao Vo, Christoph Benzmüller, and Serge Autexier. Assertion application in theorem proving and proof planning. In G. Gottlob and T. Walsh, eds., *Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI)*, Acapulco, Mexico, 2003. ISBN 0-127-05661-0.
- [C14-04] M. Wolska, B. Quoc Vo, D. Tsovaltzi, I. Kruijff-Korabayova, E. Karagjosova, H. Horacek, M. Gabsdil, A. Fiedler, and C. Benzmüller. An annotated corpus of tutorial dialogs on mathematical theorem proving. In *Proceedings of International Conference on Language Resources and Evaluation (LREC 2004)*, Lisbon, Portugal, 2004. ELDA.
- [C15-04] Jörg H. Siekmann and Christoph Benzmüller. Omega: Computer supported mathematics. In Susanne Biundo, Thom W. Frühwirth, and Günther Palm, eds., *KI 2004: Advances in Artificial Intelligence, 27th Annual German Conference on AI, KI 2004, Ulm, Germany, September 20-24, 2004, Proceedings*, no.3228 in LNCS, pp.3–28, Ulm, Germany, 2004.
- [C16-05] Christoph Benzmüller, Volker Sorge, Mateja Jamnik, and Manfred Kerber. Can a higher-order and a first-order theorem prover cooperate? In Franz Baader and Andrei Voronkov, eds., *Logic for Programming, Artificial Intelligence, and Reasoning, 11th International Conference, LPAR 2004, Montevideo, Uruguay, March 14-18, 2005, Proceedings*, no.3452 in LNCS, pp.415–431. Springer, 2005.

-
- [C17-05] Christoph Benzmüller and Chad E. Brown. A structured set of higher-order problems. In Joe Hurd and Thomas F. Melham, eds., *Theorem Proving in Higher Order Logics, 18th International Conference, TPHOLs 2005, Oxford, UK, August 22-25, 2005, Proceedings*, no.3603 in LNCS, pp.66–81. Springer, 2005.
- [C18-05] Christoph Benzmüller and Quoc Bao Vo. Mathematical domain reasoning tasks in natural language tutorial dialog on proofs. In Manuela M. Veloso and Subbarao Kambhampati, eds., *Proceedings, The Twentieth National Conference on Artificial Intelligence and the Seventeenth Innovative Applications of Artificial Intelligence Conference, July 9-13, 2005, Pittsburgh, Pennsylvania, USA*, pp.516–522. AAAI Press / The MIT Press, 2005.
- [C19-06] Serge Autexier, Christoph Benzmüller, Dominik Dietrich, Andreas Meier, and Claus-Peter Wirth. A generic modular data structure for proof attempts alternating on ideas and granularity. In Michael Kohlhase, ed., *Mathematical Knowledge Management, 4th International Conference, MKM 2005, Bremen, Germany, July 15-17, 2005, Revised Selected Papers*, Vol.3863 of LNCS, pp.126–142. Springer, 2006.
- [C20-06] Christoph Benzmüller, Helmut Horacek, Henri Lesourd, Ivana Kruijff-Korabayova, Marvin Schiller, and Magdalena Wolska. 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, 2006. ELDA.
- [C21-07] Mark Buckley and Christoph Benzmüller. An agent-based architecture for dialogue systems. In Irina Virbitskaite and Andrei Voronkov, eds., *Perspectives of Systems Informatics, 6th International Andrei Ershov Memorial Conference, PSI 2006, Novosibirsk, Russia, June 27-30, 2006. Revised Papers*, Vol.4378 of LNCS, pp.135–147. Springer, 2007.
- [C22-07] Christoph Benzmüller, Helmut Horacek, Henri Lesourd, Ivana Kruijff-Korabayova, Marvin Schiller, and Magdalena Wolska. DiaWOz-II - a tool for wizard-of-oz experiments in mathematics. In Christian Freksa, Michael Kohlhase, and Kerstin Schill, eds., *KI 2006: Advances in Artificial Intelligence, 29th Annual German Conference on AI, KI 2006, Bremen, Germany, June 14-17, 2006, Proceedings*, Vol.4314 of LNCS, pp.159–173. Springer, 2007.
- [C23-06] Christoph Benzmüller, Chad E. Brown, and Michael Kohlhase. Cut-simulation in impredicative logics. In Ulrich Furbach and Natarajan Shankar, eds., *Automated Reasoning, Third International Joint Conference, IJCAR 2006, Seattle, WA, USA, August 17-20, 2006, Proceedings*, Vol.4130 of LNCS, pp.220–234. Springer, 2006.
- [C24-07] Christoph Benzmüller, Dominik Dietrich, Marvin Schiller, and Serge Autexier. Deep inference for automated proof tutoring? In Joachim Hertzberg, Michael Beetz, and Roman Englert, eds., *KI 2007: Advances in Artificial Intelligence, 30th Annual German Conference on AI, KI 2007, Osnabrück, Germany, September 10-13, 2007, Proceedings*, pp.435–439. Springer, 2007.
- [C25-08] Christoph Benzmüller, Florian Rabe, and Geoff Sutcliffe. The core TPTP language for classical higher-order logic. In Alessandro Armando, Peter Baumgartner, and Gilles Dowek, eds., *Automated Reasoning, 4th International Joint Conference, IJCAR 2008, Sydney, Australia, August 12-15, 2008, Proceedings*, Vol.5195 of LNCS, pp.491–506. Springer, 2008.
- [C26-08] Christoph Benzmüller, Frank Theiss, Larry Paulson, and Arnaud Fietzke. LEO-II - a cooperative automatic theorem prover for higher-order logic. In Alessandro Armando, Peter Baumgartner, and Gilles Dowek, eds., *Automated Reasoning, 4th International Joint Conference, IJCAR 2008, Sydney, Australia, August 12-15, 2008, Proceedings*, Vol.5195 of LNCS, pp.162–170. Springer, 2008.
- [C27-09] Christoph Benzmüller. Automating access control logic in simple type theory with LEO-II. In Dimitris Gritzalis and Javier López, eds., *Emerging Challenges for Security, Privacy and Trust, 24th IFIP TC 11 International Information Security Conference, SEC 2009, Pafos, Cyprus, May 18-20, 2009. Proceedings*, Vol.297 of IFIP, pp.387–398. Springer, 2009.
- [C28-09] Marvin Schiller and Christoph Benzmüller. Proof granularity as an empirical problem? In José A. Moinhos Cordeiro, Boris Shishkov, Alexander Verbraeck, and Markus Helfert, eds., *CSEDU 2009 - Proceedings of the First International Conference on Computer Supported Education, Lisboa, Portugal, March 23-26, 2009 - Volume 1*, pp.350–354. INSTICC Press, 2009.
-

-
- [C29-09] Geoff Sutcliffe, Christoph Benzmüller, Chad Brown, and Frank Theiss. Progress in the development of automated theorem proving for higher-order logic. In Renate Schmidt, ed., *Automated Deduction - CADE-22, 22nd International Conference on Automated Deduction, Montreal, Canada, August 2-7, 2009. Proceedings*, Vol.5663 of *LNCS*, pp.116–130. Springer, 2009.
 - [C30-09] 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 of *Frontiers in Artificial Intelligence and Applications*, pp.599–601. IOS Press, 2009.
 - [C31-09] Marvin Schiller and Christoph Benzmüller. Presenting proofs with adapted granularity. In Bärbel Mertsching, Marcus Hund, and Muhammad Zaheer Aziz, eds., *KI 2009: Advances in Artificial Intelligence, 32nd Annual German Conference on AI, Paderborn, Germany, September 15-18, 2009. Proceedings*, Vol.5803 of *LNAI*, pp.289–297, Paderborn, Germany, 2009. Springer.
 - [C32-10] Christoph Benzmüller. Simple type theory as framework for combining logics. In *Contest paper at the World Congress and School on Universal Logic III (UNILog)*, Lisbon, Portugal, 2010. The conference had no published proceedings; the paper is available as arXiv:1004.5500v1.
 - [C33-11] Christoph Benzmüller and Valerio Genovese. Quantified conditional logics are fragments of HOL. In *The International Conference on Non-classical Modal and Predicate Logics (NCMPL)*, Guangzhou (Canton), China, 2011. The conference had no published proceedings; the paper is available as arXiv:1204.5920v1.
 - [C34-12] Christoph Benzmüller, Jens Otten, and Thomas Rath. Implementing and evaluating provers for first-order modal logics. In *Proc. of the 20th European Conference on Artificial Intelligence (ECAI)*, pp.163–168, Montpellier, France, 2012. doi:10.3233/978-1-61499-098-7-163.
 - [C35-13] Christoph Benzmüller. A top-down approach to combining logics. In *Proc. of the 5th International Conference on Agents and Artificial Intelligence (ICAART)*, Barcelona, Spain, 2013.
 - [C36-13] Christoph Benzmüller. HOL based universal reasoning. In J.Y. Beziau, A. Buchsbaum, A. Costa-Leite, and A. Altair, eds., *Handbook of the 4th World Congress and School on Universal Logic*, pp.232–233, Rio de Janeiro, Brazil, 2013.
 - [C37-13] Christoph Benzmüller. Automating quantified conditional logics in HOL. In Francesca Rossi, ed., *23rd International Joint Conference on Artificial Intelligence (IJCAI 2013)*, Beijing, China, 2013.

BOOKS AND CHAPTERS IN BOOKS

- [B01-03] Jörg Siekmann, Christoph Benzmüller, Armin Fiedler, Andreas Meier, Immanuel Normann, and Martin Pollet. In Fairouz Kamareddine, ed., *Thirty Five Years of Automating Mathematics*, Kluwer Applied Logic series (28), chap.Proof Development in OMEGA: The Irrationality of Square Root of 2, pp.271–314. Kluwer Academic Publishers, 2003.
- [B02-04] Christoph Benzmüller, Andreas Meier, and Volker Sorge. In Dieter Hutter and Werner Stephan, eds., *Mechanizing Mathematical Reasoning: Essays in Honor of Jörg H. Siekmann on the Occasion of His 60th Birthday*, Vol.2605 of *LNCS*, chap.Bridging Theorem Proving and Mathematical Knowledge Retrieval, pp.277–296. Springer, 2004.
- [B03-06] Christoph Benzmüller, Armin Fiedler, Andreas Meier, Martin Pollet, and Jörg Siekmann. In Freek Wiedijk, ed., *The Seventeen Provers of the World*, no.3600 in *LNCS*, chap.OMEGA, pp.127–141. Springer, 2006.
- [B04-09] Claus-Peter Wirth, Jörg Siekmann, Christoph Benzmüller, and Serge Autexier. In D. Gabbay and J. Woods, eds., *Handbook of the History of Logic, Volume 5 – Logic from Russell to Church*, chap.Jacques Herbrand: Life, Logic, and Automated Deduction. Elsevier, 2009.
- [B05-] Christoph Benzmüller and Chad E. Brown. In D. Gabbay, J. Siekmann, and J. Woods, eds., *The Handbook of the History of Logic, Volume 9 – Logic and Computation*, chap.Automation of Higher-Order Logic. Elsevier. Invited chapter, In Preparation.

-
- [B06-07] Christoph Benzmüller and Chad E. Brown. In Roman Matuszewski and Anna Zalewska, eds., *From Insight to Proof – Festschrift in Honour of Andrzej Trybulec*, Vol.10(23) of *Studies in Logic, Grammar, and Rhetoric*, chap.The curious inference of Boolos in MIZAR and OMEGA, pp.299–388. The University of Białystok, Polen, 2007.
 - [B07-07] Christoph Benzmüller, Helmut Horacek, Ivana Kruijff-Korabayova, Manfred Pinkal, Jörg Siekmann, and Magdalena Wolska. In Ruqian Lu, Jörg Siekmann, and Carsten Ullrich, eds., *Cognitive Systems*, Vol.4429 of *LNCs*, chap.Natural Language Dialog with a Tutor System for Mathematical Proofs, pp.1–14. Springer, 2007.
 - [B08-08] Christoph Benzmüller, Chad E. Brown, and Michael Kohlhase. In Christoph Benzmüller, Chad E. Brown, Jörg Siekmann, and Richard Statman, eds., *Festschrift in Honor of Peter B. Andrews on His 70th Birthday*, *Studies in Logic, Mathematical Logic and Foundations*, chap.Cut Elimination with Xi-Functionality. College Publications, 2008.
 - [B09-08] Christoph Benzmüller and Lawrence Paulson. In Christoph Benzmüller, Chad E. Brown, Jörg Siekmann, and Richard Statman, eds., *Festschrift in Honor of Peter B. Andrews on His 70th Birthday*, *Studies in Logic, Mathematical Logic and Foundations*, chap.Exploring Properties of Normal Multimodal Logics in Simple Type Theory with LEO-II. College Publications, 2008.
 - [B10-10] Serge Autexier, Christoph Benzmüller, Dominik Dietrich, and Jörg Siekmann. In Matthew W. Crocker and Jörg Siekmann, eds., *Resource-Adaptive Cognitive Processes*, *Cognitive Technologies Series*, chap.OMEGA: Resource-Adaptive Processes in an Automated Reasoning Systems, pp.389–420. Springer, 2010.
 - [B11-10] Christoph Benzmüller, Marvin Schiller, and Jörg Siekmann. In Matthew W. Crocker and Jörg Siekmann, eds., *Resource-Adaptive Cognitive Processes*, *Cognitive Technologies Series*, chap.Resource-Bounded Modelling and Analysis of Human-Level Interactive Proofs. Springer, 2010.
 - [B12-10] Christoph Benzmüller. In Simon Siegler and Nathan Wasser, eds., *Verification, Induction, Termination Analysis - Festschrift for Christoph Walther on the Occasion of His 60th Birthday*, Vol.6463 of *LNCs*, chap.Verifying the Modal Logic Cube is an Easy Task (for Higher-Order Automated Reasoners), pp.117–128. Springer, 2010.
 - [B13-11] Christoph Benzmüller and Adam Pease. In Adam Pease, ed., *Ontology: A Practical Guide*, chap.Knowledge Engineering Tools, pp.171–214. Articulate Software Press, Angwin, CA, USA, 2011. (This chapter has some essential overlap with the 2012 journal article with A. Pease titled *Higher-Order Aspects and Context in SUMO*).

EDITED PROCEEDINGS AND EDITED BOOKS

- [E01-02] Jürgen Zimmer and Christoph Benzmüller, eds.. *CALCULEMUS Autumn School 2002: Student Poster Abstracts*, no.SR-02-06, 2002. (115 pages).
- [E02-02] Christoph Benzmüller and Regine Endsuleit, eds.. *CALCULEMUS Autumn School 2002: Course Notes (Part I)*, no.SR-02-07, 2002. (168 pages).
- [E03-02] Christoph Benzmüller and Regine Endsuleit, eds.. *CALCULEMUS Autumn School 2002: Course Notes (Part II)*, no.SR-02-08, 2002. (130 pages).
- [E04-02] Christoph Benzmüller and Regine Endsuleit, eds.. *CALCULEMUS Autumn School 2002: Course Notes (Part III)*, no.SR-02-09, 2002. (121 pages).
- [E05-03] Christoph Benzmüller, ed.. *Systems for Integrated Computation and Deduction – Interim Report of the CALCULEMUS IHP Network*, no.SR-03-05, 2003.
- [E06-04] Christoph Benzmüller and Wolfgang Windsteiger, eds.. *Computer-Supported Mathematical Theory Development*, no.04-14 in *RISC Report Series*. RISC Institute, University of Linz, July 2004. Proceedings of the first “Workshop on Computer-Supported Mathematical Theory Development” held in the frame of IJCAR’04 in Cork, Ireland, July 5, 2004. ISBN 3-902276-04-5.

-
- [E07-06] Christoph Benzmüller, ed.. *Special Issue on Assistance Systems for Mathematics*, Vol. 4 of *Journal of Applied Logic*. Elsevier, 2006.
 - [E08-05] Christoph Benzmüller, John Harrison, and Carsten Schürmann, eds.. *Proceedings of the LPAR-05 Workshop: Empirically Successful Automated Reasoning in Higher-Order Logic (ESHOL)*, Wexford Hotel, Montego Bay, Jamaica, 2005. Available from <http://arxiv.org/abs/cs/0601042>.
 - [E09-07] Serge Autexier and Christoph Benzmüller, eds.. *User Interfaces for Theorem Provers, Proceedings of UITP'06*, Vol.174 of *Electronic Notes in Theoretical Computer Science*. Elsevier, 2007.
 - [E10-06] Christoph Benzmüller, Bernd Fischer, and Geoff Sutcliffe, eds.. *Proceedings of the 6th International Workshop on the Implementation of Logics*, Vol.212 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2006.
 - [E11-08] Christoph Benzmüller, Chad E. Brown, Jörg Siekmann, and Richard Statman, 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. ISBN 978-1-904987-70-3.
 - [E12-09] Serge Autexier and Christoph Benzmüller, eds.. *Proceedings of the 8th International Workshop on User Interfaces for Theorem Provers (UITP 2008)*, Montréal, Canada, Vol.226 of *Electronic Notes in Theoretical Computer Science*. Elsevier, 2009.

WORKSHOP PAPERS

- [BP13] Christoph Benzmüller and Bruno Woltzenlogel Paleo. The tptp process instruction language. In S. Schulz, G. Sutcliffe, and B. Konev, eds., *Proceedings of the 10th International Workshop on the Implementation of Logics*, EasyChair Proceedings in Computing, 2013. To appear.
- [W01-98] Jörg Siekmann, Stephan Hess, Christoph Benzmüller, Lassaad Cheikhrouhou, Detlef Fehrer, Armin Fiedler, Helmut Horacek, Michael Kohlhase, Karsten Konrad, Andreas Meier, Erica Melis, and Volker Sorge. A distributed graphical user interface for the interactive proof system. In *Proceedings of the International Workshop User Interfaces for Theorem Provers 1998 (UITP'98)*, pp.130–138, Eindhoven, Netherlands, 1998.
- [W02-98] Christoph Benzmüller and Volker Sorge. Integrating TPS with Ω MEGA. In Jim Grundy and Malcolm Newey, eds., *Theorem Proving in Higher Order Logics: Emerging Trends*, Technical Report 98-08, Department of Computer Science and Computer Science Lab, The Australian National University, pp.1–18, Canberra, Australia, October 1998.
- [W03-99] Christoph Benzmüller and Volker Sorge. Towards fine-grained proof planning with critical agents. In *Proceedings of the 6th Workshop on Automated Reasoning*, pp.19–20. Edinburgh College of Art & Division of Informatics, University of Edinburgh, 1999.
- [W04-99] Christoph Benzmüller, Mateja Jamnik, Manfred Kerber, and Volker Sorge. Agent based mathematical reasoning. In *Proceedings of the Calculemus Workshop: Systems for Integrated Computation and Deduction*, pp.1–12, July 1999.
- [W05-00] Jörg Siekmann, Christoph Benzmüller, Armin Fiedler, Andreas Franke, George Goguadze, Helmut Horacek, Michael Kohlhase, Paul Libbrecht, Andreas Meier, Erica Melis, Martin Pollet, Volker Sorge, Carsten Ullrich, and Jürgen Zimmer. Adaptive course generation and presentation. In P. Brusilovski, ed., *Proceedings of the Fifth International Conference on Intelligent Tutoring Systems—Workshop W2: Adaptive and Intelligent Web-Based Education Systems*, pp.54–61, Montreal, 2000.
- [W06-01] 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*, pp.1–12, 2001.
- [W07-00] Christoph Benzmüller, Mateja Jamnik, Manfred Kerber, and Volker Sorge. Resource guided concurrent deduction. In *Proceedings of the AISB'2000 Symposium 'How to design a functioning mind'*, pp.137–138, Birmingham, England, 2000. Also in: Proceedings of the 7th Workshop on Automated Reasoning 'Bridging the Gap between Theory and Practice'.

-
- [W08-01] 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*, pp.5–6. University of York, 2001.
- [W09-01] Christoph Benzmüller, Andreas Meier, Martin Pollet, and Volker Sorge. 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*, pp.1–2. University of York, 2001.
- [W10-01] Christoph Benzmüller. An agent based approach to reasoning. In *Extended abstract for invited plenary talk at AISB’01 Convention ‘Agents and Cognition*, pp.57–58. University of York, 2001.
- [W11-01] Christoph Benzmüller, Mateja Jamnik, Manfred Kerber, and Volker Sorge. An agent-oriented approach to reasoning. In *Proceedings of the Calculemus Workshop 2001*, pp.48–63, Siena, Italy, 2001.
- [W12-01] Christoph Benzmüller, Andreas Meier, Erica Melis, Martin Pollet, and Volker Sorge. Proof planning: A fresh start? In *Proceedings of the IJCAR 2001 Workshop: Future Directions in Automated Reasoning*, pp.25–37, Siena, Italy, 2001.
- [W13-01] Christoph Benzmüller and Manfred Kerber. A lost proof. In *Proceedings of the IJCAR 2001 Workshop: Future Directions in Automated Reasoning*, pp.13–24, Siena, Italy, 2001.
- [W14-01] Christoph Benzmüller, Andreas Meier, and Volker Sorge. Distributed assertion retrieval. In *First International Workshop on Mathematical Knowledge Management RISC-Linz*, pp.1–7, Schloss Hagenberg, 2001.
- [W15-02] 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*, pp.1–3, London, England, 2002.
- [W16-02] Malte Hübner, Serge Autexier, and Christoph Benzmüller. Agent-based proof search with indexed formulas. In *Additional Proceedings of 10th Symposium on the Integration of Symbolic Computation and Mechanized Reasoning (CALCULEMUS 2002)*, pp.11–20, Marseilles, France, 2002.
- [W17-02] Christoph Benzmüller, Corrado Giromini, and Andreas Nonnengart. Symbolic verification of hybrid systems supported by mathematical services. In *Additional Proceedings of 10th Symposium on the Integration of Symbolic Computation and Mechanized Reasoning (CALCULEMUS 2002)*, pp.1–10, Marseilles, France, 2002.
- [W18-02] Christoph Benzmüller, Corrado Giromini, Andreas Nonnengart, and Jürgen Zimmer. 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*, pp.29–39, Copenhagen, Denmark, 2002.
- [W19-03] 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.
- [W20-03] Christoph Benzmüller, Armin Fiedler, Malte Gabsdil, Helmut Horacek, Ivana Kruijff-Korbayova, Manfred Pinkal, Jörg Siekmann, Dimitra Tsovaltzi, Bao Quoc Vo, and Magdalena Wolska. Tutorial dialogs on mathematical proofs. In *Proceedings of IJCAI-03 Workshop on Knowledge Representation and Automated Reasoning for E-Learning Systems*, pp.12–22, Acapulco, Mexico, 2003.
- [W21-03] 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)*, pp.1–16, Rome, Italy, 2003. MMIII ARACNE EDITRICE S.R.L. (ISBN 88-7999-545-6).
- [W22-03] Christoph Benzmüller. The CALCULEMUS research training network: A short overview. In *Proceedings of the First QPQ Workshop on Deductive Software Components at CADE-19*, pp.13–27, Miami, USA, 2003.
- [W23-03] Christoph Benzmüller, Armin Fiedler, Malte Gabsdil, Helmut Horacek, Ivana Kruijff-Korbayova, Manfred Pinkal, Jörg Siekmann, Dimitra Tsovaltzi, Bao Quoc Vo, and Magdalena Wolska. 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.

-
- [W24-03] Malte Hübner, Christoph Benzmüller, Serge Autexier, and Andreas Meier. Interactive proof construction at the task level. In *Proceedings of the Workshop User Interfaces for Theorem Provers (UITP 2003)*, pp.81–100, Rome, Italy, 2003. ARACNE EDITRICE S.R.L. (ISBN 88-7999-545-6). Also available as: Technical Report No. 189, Institut für Informatik, Albert-Ludwig-Universität, Freiburg.
- [W25-03] Christoph Benzmüller, Armin Fiedler, Malte Gabsdil, Helmut Horacek, Ivana Kruijff-Korabayova, Dimitra Tsovaltzi, Bao Quoc Vo, and Magdalena Wolska. 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.
- [W26-03] Christoph Benzmüller, Armin Fiedler, Malte Gabsdil, Helmut Horacek, Ivana Kruijff-Korabayova, Dimitra Tsovaltzi, Bao Quoc Vo, and Magdalena Wolska. 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.
- [W27-03] Serge Autexier and Christoph Benzmüller. Omega — from proof planning towards mathematical knowledge management. In *Mathematical Knowledge Management Symposium*, Heriot-Watt University, Edinburgh, Scotland, 2003.
- [W28-02] Mateja Jamnik, Manfred Kerber, Martin Pollet, and Christoph Benzmüller. Automatic learning of proof methods in proof planning. In *Proceedings of the 9th Workshop on Automated Reasoning: Bridging the Gap between Theory and Practice*, pp.1–2, London, England, 2002.
- [W29-05] 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)*, pp.40–67, Edinburgh, Scotland, 2005.
- [W30-05] 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)*, pp.16–39, Edinburgh, Scotland, 2005.
- [W31-05] 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)*, pp.25–44, Wexford Hotel, Montego Bay, Jamaica, 2005. Available from <http://arxiv.org/abs/cs/0601042>.
- [W32-05] Christoph Benzmüller, Volker Sorge, Mateja Jamnik, and Manfred Kerber. 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)*, pp.45–58, Wexford Hotel, Montego Bay, Jamaica, 2005. Available from <http://arxiv.org/abs/cs/0601042>.
- [W33-06] 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.
- [W34-06] 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.
- [W35-06] 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.
- [W36-07] Christoph Benzmüller, Larry Paulson, Frank Theiss, and Arnaud Fietzke. The LEO-II project. In *Proceedings of the Fourteenth Workshop on Automated Reasoning, Bridging the Gap between Theory and Practice*. Imperial College, London, England, 2007.
- [W37-07] C. Benzmüller, L. Paulson, F. Theiss, and A. Fietzke. Progress report on LEO-II – an automatic theorem prover for higher-order logic. In *TPHOLs 2007 Emerging Trends Proceedings*, pp.33–48. Internal Report 364/07, Department of Computer Science, University Kaiserslautern, Germany, 2007.

-
- [W38-07] 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*, Jacobs University Bremen, Germany, 2007.
- [W39-08] Christoph Benzmüller, Florian Rabe, Carsten Schürmann, and Geoff Sutcliffe. Evaluation of systems for higher-order logic (eshol). In Boris Konev, Renate A. Schmidt, and Stephan Schulz, eds., *Proceedings of the First International Workshop on Practical Aspects of Automated Reasoning, Sydney, Australia, August 10-11, 2008*, Vol.373 of *CEUR Workshop Proceedings*. CEUR-WS.org, 2008. (invited non-reviewed paper).
- [W40-12] Christoph Benzmüller and Adam Pease. Progress in automating higher-order ontology reasoning. In Renate A. Schmidt, Stephan Schulz, and Boris Konev, eds., *PAAR-2010 – Workshop on Practical Aspects of Automated Reasoning*, Vol. 9 of *EPiC Series*, pp.22–32. EasyChair, 2012.
- [W41-10] Christoph Benzmüller. Combining logics in simple type theory. In Jürgen Dix, Joao Leite, Guido Governatori, and Woitek Jamroga, eds., *Computational Logic in Multi-Agent Systems, 11th International Workshop, CLIMA XI, Lisbon, Portugal, August 16-17, 2010. Proceedings*, Vol.6245 of *Lecture Notes in Artificial Intelligence*, pp.33–48, Lisbon, Portugal, 2010. Springer.
- [W42-10] 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)*, Lisbon, Portugal, 2010.
- [W43-10] Adam Pease and Christoph Benzmüller. Ontology archaeology: Mining a decade of effort on the suggested upper merged ontology. In A. Bundy, J. Lehmann, G. Qi, and I. J. Varzinczak, eds., *The ECAI-10 Workshop on Automated Reasoning about Context and Ontology Evolution (ARCOE-10)*, August 16-17, Lisbon, Portugal, 2010.
- [W44-10] Christoph Benzmüller and Adam Pease. Reasoning with embedded formulas and modalities in SUMO. In A. Bundy, J. Lehmann, G. Qi, and I. J. Varzinczak, eds., *The ECAI-10 Workshop on Automated Reasoning about Context and Ontology Evolution (ARCOE-10)*, August 16-17, Lisbon, Portugal, 2010.
- [W45-10] 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.
- [W46-12] Christoph Benzmüller and Marvin Schiller. Adaptive assertion-level proofs. In Aaron Stump, Geoff Sutcliffe, and Cesare Tinelli, eds., *EMSQMS 2010 – Workshop on Evaluation Methods for Solvers and Quality Metrics for Solutions*, Vol. 6 of *EPiC Series*, pp.39–40. EasyChair, 2012.
- [W47-12] Nik Sultana and Christoph Benzmüller. Understanding LEO-II’s proofs. In Eugenia Ternovska, Konstantin Korovin, and Stephan Schulz, eds., *The 9th International Workshop on the Implementation of Logics (IWIL-2012, affiliated with LPAR-2012)*, Merida, Venezuela, 2012.
- [W48-12] Christoph Benzmüller, Jens Otten, and Thomas Rath. Implementing different proof calculi for first-order modal logics. In Pascal Fontaine, Renate Schmidt, and Stephan Schulz, eds., *Third Workshop on Practical Aspects of Automated Reasoning (PAAR-2012)*, Manchester, UK, 2012.

THESIS

- [T1-94] Christoph Benzmüller. Eine Fallstudie zur Spezifikation von Systemanforderungen in der Spezifikationsprache OBSCURE. Master Thesis, Department of Computer Science, Saarland University, Germany, 1994.
- [T2-99] Christoph Benzmüller. *Equality and Extensionality in Higher-Order Theorem Proving*. Ph.D. thesis, Naturwissenschaftlich-Technische Fakultät I, Saarland University, Saarbrücken, Germany, 1999.
- [T3-06] Christoph Benzmüller. Cumulative habilitation script. Faculty 6 – Natural Sciences and Technology, Saarland University, Germany, 2006.

TECHNICAL REPORTS AND OTHER PAPERS

- [R01-92] Serge Autexier, Christoph Benzmüller, and Ramses A. Heckler. Das Fallbeispiel ‘UNIX’ — Dokumentation einer UNIX-Filesystem-Spezifikation mit OWEB. Working Paper WP 92/36, Department of Computer Science, Saarland University, Juli 1992.
- [R02-93] 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, Department of Computer Science, Saarland University, 1993.
- [R03-99] Christoph Benzmüller. Proposal for my PhD-study. Draft, AG Siekmann, Saarland University, 1999.
- [R04-97] 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.
- [R05-97] Christoph Benzmüller and Michael Kohlhase. Model existence for higher-order logic. SEKI Report (ISSN 1437-4447) SR-97-09, Department of Computer Science, Saarland University, 1997.
- [R06-97] Christoph Benzmüller and Michael Kohlhase. Henkin completeness of higher-order resolution. SEKI Report (ISSN 1437-4447) SR-97-10, Department of Computer Science, Saarland University, 1997.
- [R07-98] Christoph Benzmüller. An adaptation of paramodulation and rue-resolution to higher-order logic. SEKI Report (ISSN 1437-4447) SR-98-07, Department of Computer Science, Saarland University, 1998.
- [R08-99] Christoph Benzmüller. Forschungsinteressen am Graduiertenkolleg Kognitionswissenschaft. Draft, AG Siekmann, Saarland University, 1999.
- [R09-99] Christoph Benzmüller and Volker Sorge. Resource adaptive agents in interactive theorem proving. SEKI Report (ISSN 1437-4447) SR-99-02, Department of Computer Science, Saarland University, 1999. arXiv:0901.3585.
- [R10-99] Christoph Benzmüller, Mateja Jamnik, Manfred Kerber, and Volker Sorge. Towards concurrent resource guided deduction. SEKI Report (ISSN 1437-4447) SR-99-07, Department of Computer Science, Saarland University, 1999.
- [R11-99] Christoph Benzmüller. Equality and extensionality in higher-order theorem proving. SEKI Report (ISSN 1437-4447) SR-99-08, Department of Computer Science, Saarland University, 1999.
- [R12-99] Christoph Benzmüller, Volker Sorge, and John Byrnes. OANTS for interactive ATP. Draft, AG Siekmann, Saarland University, 1999.
- [R13-00] 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.
- [R14-01] Mateja Jamnik, Manfred Kerber, and Christoph Benzmüller. Automatic learning of proof methods in proof planning. Tech. rep.CSRP-01-08, University of Birmingham, School of Computer Science, 2001.
- [R15-02] Christoph Benzmüller, Armin Fiedler, Andreas Meier, and Martin Pollet. Irrationality of square root of 2 – a case study in omega. SEKI Report (ISSN 1437-4447) SR-02-03, Department of Computer Science, Saarland University, 2002.
- [R16-02] Mateja Jamnik, Manfred Kerber, Martin Pollet, and Christoph Benzmüller. Automatic learning of proof methods in proof planning. Tech. rep.CSRP-02-05, University of Birmingham, School of Computer Science, 2002.
- [R17-02] Christoph Benzmüller. A remark on higher order RUE-resolution with EXTRUE. SEKI Report (ISSN 1437-4447) SR-02-05, Fachbereich Informatik, Universität des Saarlandes, Saarbrücken, Germany, 2002. arXiv:0901.3608.
- [R18-03] Christoph Benzmüller, Chad E. Brown, and Michael Kohlhase. Higher order semantics and extensionality. Technical Report CMU-01-03, Carnegie Mellon University, Pittsburgh, PA, 2003.

-
- [R19-03] Christoph Benzmlle, Chad E. Brown, and Michael Kohlhase. Semantic techniques for cut-elimination in higher order logic. Tech. rep., Saarland University, Saarbrcken, Germany and Carnegie Mellon University, Pittsburgh, USA, 2003. Manuscript.
- [R20-03] Quoc Bao Vo, Christoph Benzmlle, and Serge Autexier. An approach to assertion application via generalized resolution. SEKI Report (ISSN 1437-4447) SR-03-01, Fachrichtung Informatik, Universitt des Saarlandes, Saarbrcken, Germany, 2003.
- [R21-03] Serge Autexier, Christoph Benzmlle, and Dieter Hutter. Towards a framework to integrate proof search paradigms. SEKI Report (ISSN 1437-4447) SR-03-02, Fachrichtung Informatik, Universitt des Saarlandes, Saarbrcken, Germany, 2003.
- [R22-03] Christoph Benzmlle and Corinna Hahn (editors). The CALCULEMUS Midterm Report. Unpublished EU Report, Saarland University, Saarbrcken, Germany, March 2003.
- [R23-03] Christoph Benzmlle. Alonzo: Deduktionsagenten hherer ordnung fr mathematische assistenzsysteme. Project proposal in the DFG Aktionsplan Informatik, 2003.
- [R24-03] Christoph Benzmlle and Dieter Hutter. CALCULEMUS-II: Computer-supported mathematical knowledge evolution. Project proposal for a Marie Curie Research Training Network within the EU 6th framework, 2003.
- [R25-01] Manfred Pinkal, Jrg Siekmann, and Christoph Benzmlle. Dialog: Tutorieller dialog mit einem mathematik assistenzsystem. Project proposal in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes, 2001.
- [R26-01] Jrg Siekmann, Christoph Benzmlle, and Erica Melis. Omega: Ressourcenadaptive beweisplanung. Project proposal in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes, 2001.
- [R27-04] Christoph Benzmlle. Alonzo: Higher-order reasoning agents for mathematics. EURYI project proposal, 2004.
- [R28-04] Manfred Pinkal, Jrg Siekmann, and Christoph Benzmlle. Dialog: Tutorial dialog with an assistance system for mathematics. Project report in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes, 2004.
- [R29-04] Jrg Siekmann, Christoph Benzmlle, and Erica Melis. Omega: Resource-adaptive proof planning. Project report in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes, 2004.
- [R30-04] Manfred Pinkal, Jrg Siekmann, Christoph Benzmlle, and Ivana Kruijff-Korabayova. 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.
- [R31-04] Jrg Siekmann, Christoph Benzmlle, and Serge Autexier. Omega: Agent-oriented proof planning. Project proposal in the Collaborative Research Centre SFB 378 on Resource-adaptive Cognitive Processes, 2004.
- [R32-04] Christoph Benzmlle. Alonzo: Higher-order reasoning agents and semantical mediation of mathematical knowledge. DFG research grant proposal, 2004.
- [R33-04] Serge Autexier, Christoph Benzmlle, Michael Kohlhase, and Jrg Siekmann. Vermath: Distributed mathematical problem solving. DFG research grant proposal, 2004.
- [R34-04] Christoph Benzmlle, Michael Kohlhase, and Jrg Siekmann. Abschlussbericht projekt hotel. DFG research grant report, 2004.
- [R35-04] Mark Buckley and Christoph Benzmlle. A dialogue manager for the dialog demonstrator. SEKI Report (ISSN 1437-4447) SR-04-01, Fachrichtung Informatik, Universitt des Saarlandes, Saarbrcken, Germany, 2004.
- [R36-04] Christoph Benzmlle and Corinna Hahn. The calculemus final report. Final report of the Marie Curie Research Training Network CALCULEMUS within the EU 5th framework, 2004.

-
- [R38-06] Christoph E. Benzmüller and Chad E. Brown. Semantics of higher-order logic, 2006. 18th European Summer School in Logic, Language and Information (ESSLLI'06).
- [R39-06] Christoph Benzmüller, Chad E. Brown, and Michael Kohlhase. Cut-simulation in impredicative logics (extended version). SEKI Report (ISSN 1437-4447) SR-2006-01, Saarland University, Saarbrücken, Germany, 2006.
- [R40-08] 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.
- [R41-08] Manfred Pinkal, Jörg Siekmann, Christoph Benzmüller, and Ivana Kruijff-Korabayova. 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.
- [R42-08] Christoph Benzmüller. Automating Access Control Logics in Simple Type Theory with LEO-II. SEKI Report (ISSN 1437-4447) SR-2008-01, Fachbereich Informatik, Universität des Saarlandes, Saarbrücken, Germany, 2008. <http://arxiv.org/abs/0901.3574>.
- [R43-09] Claus-Peter Wirth, Jörg Siekmann, Christoph Benzmüller, and Serge Autexier. *Lectures on Jacques Herbrand as a Logician*. SEKI Report SR-2009-01 (ISSN 1437-4447). SEKI Publications, DFKI Bremen GmbH, Safe and Secure Cognitive Systems, Cartesium, Enrique Schmidt Str. 5, D-28359 Bremen, Germany, 2009. <http://arxiv.org/abs/0902.4682>.
- [R44-09] Marvin Schiller and Christoph Benzmüller. *Granularity-Adaptive Proof Presentation*. SEKI Working-Paper SWP-2009-01 (ISSN 1860-5931). SEKI Publications, DFKI Bremen GmbH, Safe and Secure Cognitive Systems, Cartesium, Enrique Schmidt Str. 5, D-28359 Bremen, Germany, 2009. <http://arxiv.org/abs/0903.0314>.
- [R45-09] Christoph Benzmüller and Lawrence C. Paulson. *Quantified Multimodal Logics in Simple Type Theory*. SEKI Report SR-2009-02 (ISSN 1437-4447). SEKI Publications, DFKI Bremen GmbH, Safe and Secure Cognitive Systems, Cartesium, Enrique Schmidt Str. 5, D-28359 Bremen, Germany, 2009. <http://arxiv.org/abs/0905.2435>.
- [R46-09] Christoph Benzmüller. *Automating Quantified Multimodal Logics in Simple Type Theory – A Case Study*. SEKI Working-Paper SWP-2009-02 (ISSN 1860-5931). SEKI Publications, DFKI Bremen GmbH, Safe and Secure Cognitive Systems, Cartesium, Enrique Schmidt Str. 5, D-28359 Bremen, Germany, 2009. <http://arxiv.org/abs/0905.4369>.
- [R47-09] Christoph Benzmüller. LEO-II im Ontologieschliessen – Antrag auf ein Forschungsvorhaben an die DFG. International University in Germany, Bruchsal, 2009.
- [R48-09] Christoph Benzmüller. A note on LEO-II and the basic fragment of simple type theory. AAR Newsletter No. 84, July 2009.
- [R49-09] 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. Saarland University, 2009.
- [R50-09] 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. Saarland University, 2009.
- [R51-09] 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.
- [R52-11] Christoph Benzmüller, Dov Gabbay, Valerio Genovese, and Daniele Rispoli. Embedding and automating conditional logics in classical higher-order logic. Tech. rep., 2011. arXiv:arXiv:1207.6685v1 (see <http://arxiv.org/abs/1106.3685>).
- [R53-12] Christoph Benzmüller and Thomas Raths. FMLtoHOL (version 1.0): Automating first-order modal logics with LEO-II and friends. Tech. rep., 2012. arXiv:1207.6685 (see <http://arxiv.org/abs/1207.6685>).
- [R54-13] Christoph Benzmüller and Bruno Woltzenlogel Paleo. Formalization, mechanization and automation of gödel's proof of gödel's existence. Tech. rep., 2013. Technical Report.