KWARC Publications 2011-2012

Michael Kohlhase

November 13, 2012

Books

[1] Christoph Lange. Enabling Collaboration on Semiformal Mathematical Knowledge by Semantic Web Integration. Studies on the Semantic Web 11. Heidelberg and Amsterdam: AKA Verlag and IOS Press, 2011. ISBN: 978-1-60750-840-3.

Conference Proceedings Edited

Journal Articles

- [2] Mihnea Iancu, Michael Kohlhase, Florian Rabe, and Josef Urban. "The Mizar Mathematical Library in OMDoc: Translation and Applications". In: Journal of Automated Reasoning (2012). DOI: 10.1007/s10817-012-9271-4. URL: https://svn.omdoc.org/repos/latin/public/MizarOMDocAppl.pdf. in press.
- [3] Manfred Kerber and Michael Kohlhase. "Reasoning without Believing: On the mechanization of Presuppositions and partiality". In: *Journal of Applied Non-Classical Logics* (2012). in press.
- [4] Andrea Kohlhase and Michael Kohlhase. "Spreadsheets with a Semantic Layer". In: Electronic Communications of the EASST: Specification, Transformation, Navigation Special Issue dedicated to Bernd Krieg-Brückner on the Occasion of his 60th Birthday (2012). Ed. by Till Mossakowski, Markus Roggenbach, and Lutz Schröder. accepted. URL: http://kwarc.info/kohlhase/papers/easst11.pdf.
- [5] Michael Kohlhase and Florian Rabe. "Semantics of OpenMath and MathmML3". In: Mathematics in Computer Science 6.3 (2012), pp. 235–260. URL: http://kwarc.info/kohlhase/submit/mcs12.pdf.
- [6] Florian Rabe. "A Logical Framework Combining Model and Proof Theory". In: Mathematical Structures in Computer Science (2012). URL: http://kwarc.info/frabe/Research/rabe_combining_10.pdf. Forthcoming.
- [7] S. Awodey and F. Rabe. "Kripke Semantics for Martin-Löf's Extensional Type Theory".
 In: Logical Methods in Computer Science 7.3 (2011).
- [8] F. Horozal and F. Rabe. "Representing Model Theory in a Type-Theoretical Logical Framework". In: Theoretical Computer Science 412.37 (2011), pp. 4919–4945.
- [9] Mihnea Iancu and Florian Rabe. "Formalizing Foundations of Mathematics". In: *Mathematical Structures in Computer Science* 21.4 (2011), pp. 883–911.

[10] Michael Kohlhase, Joe Corneli, Catalin David, Deyan Ginev, Constantin Jucovschi, Andrea Kohlhase, Christoph Lange, Bogdan Matican, Stefan Mirea, and Vyacheslav Zholudev. "The Planetary System: Web 3.0 & Active Documents for STEM". In: Procedia Computer Science 4 (2011): Special issue: Proceedings of the International Conference on Computational Science (ICCS). Ed. by Mitsuhisa Sato, Satoshi Matsuoka, Peter M. Sloot, G. Dick van Albada, and Jack Dongarra. Finalist at the Executable Paper Grand Challenge, pp. 598–607. DOI: 10.1016/j.procs.2011.04.063. URL: https://svn.mathweb.org/repos/planetary/doc/epc11/paper.pdf.

Book Chapters

[11] Christoph Lange and Michael Kohlhase. "Mathematical Mashups". In: Semantic Mashups. Ed. by Brigitte Endres-Niggemeyer. Springer, 2012.

Articles in Collections

Conference Contributions (Peer Reviewed, Archival Proceedings)

- [12] Catalin David, Constantin Jucovschi, Andrea Kohlhase, and Michael Kohlhase. "Semantic Alliance: A Framework for Semantic Allies". In: Intelligent Computer Mathematics. Conferences on Intelligent Computer Mathematics (CICM) (Bremen, Germany, July 9–14, 2012). Ed. by Johan Jeuring, John A. Campbell, Jacques Carette, Gabriel Dos Reis, Petr Sojka, Makarius Wenzel, and Volker Sorge. LNAI 7362. Springer Verlag, 2012, pp. 49–64. URL: http://kwarc.info/kohlhase/submit/mkm12-SAlly.pdf.
- [13] Fulya Horozal, Michael Kohlhase, and Florian Rabe. "Extending MKM Formats at the Statement Level". In: *Intelligent Computer Mathematics*. Conferences on Intelligent Computer Mathematics (CICM) (Bremen, Germany, July 9–14, 2012). Ed. by Johan Jeuring, John A. Campbell, Jacques Carette, Gabriel Dos Reis, Petr Sojka, Makarius Wenzel, and Volker Sorge. LNAI 7362. Springer Verlag, 2012, pp. 65–80. URL: http://kwarc.info/kohlhase/submit/mkm12-p2s.pdf.
- [14] Mihnea Iancu and Florian Rabe. "Management of Change in Declarative Languages". In: *Intelligent Computer Mathematics*. Conferences on Intelligent Computer Mathematics (CICM) (Bremen, Germany, July 9–14, 2012). Ed. by Johan Jeuring, John A. Campbell, Jacques Carette, Gabriel Dos Reis, Petr Sojka, Makarius Wenzel, and Volker Sorge. LNAI 7362. Springer Verlag, 2012, pp. 325–340.
- [15] Constantin Jucovschi. "Cost-Effective Integration of MKM Semantic Services into Editing Environments". In: Intelligent Computer Mathematics. Conferences on Intelligent Computer Mathematics (CICM) (Bremen, Germany, July 9–14, 2012). Ed. by Johan Jeuring, John A. Campbell, Jacques Carette, Gabriel Dos Reis, Petr Sojka, Makarius Wenzel, and Volker Sorge. LNAI 7362. Springer Verlag, 2012, pp. 96–110. URL: http://arxiv.org/pdf/1203.3316v2.pdf.
- [16] Michael Kohlhase. "The Planetary Project: Towards eMath3.0". In: Intelligent Computer Mathematics. Conferences on Intelligent Computer Mathematics (CICM) (Bremen, Germany, July 9–14, 2012). Ed. by Johan Jeuring, John A. Campbell, Jacques Carette, Gabriel Dos Reis, Petr Sojka, Makarius Wenzel, and Volker Sorge. LNAI 7362. Springer Verlag, 2012, pp. 448–452. arXiv: 1206.5048 [cs.DL].
- [17] Michael Kohlhase, Bogdan A. Matican, and Corneliu C. Prodescu. "MathWebSearch 0.5 Scaling an Open Formula Search Engine". In: Intelligent Computer Mathematics. Conferences on Intelligent Computer Mathematics (CICM) (Bremen, Germany, July 9–14, 2012). Ed. by Johan Jeuring, John A. Campbell, Jacques Carette, Gabriel Dos Reis, Petr Sojka, Makarius Wenzel, and Volker Sorge. LNAI 7362. Springer Verlag, 2012, pp. 342–357. URL: http://kwarc.info/kohlhase/submit/aisc12-mws.pdf.

- [18] Christoph Lange, Patrick Ion, Anastasia Dimou, Charalampos Bratsas, Wolfram Sperber, Michael Kohlhase, and Ioannis Antoniou. "Bringing Mathematics To the Web of Data: the Case of the Mathematics Subject Classification". In: The Semantic Web. 9th Extended Semantic Web Conference (ESWC) (Hersonissos, Crete, Greece, May 27–31, 2012). Ed. by Elena Simperl, Philipp Cimiano, Axel Polleres, Oscar Corcho, and Valentina Presutti. Lecture Notes in Computer Science 7295. Springer, 2012, pp. 763–777. DOI: 10.1007/978–3-642-30284-8_58. URL: http://kwarc.info/clange/pubs/eswc2012-msc-skos.pdf.
- [19] Christoph Lange, Patrick Ion, Anastasia Dimou, Charalampos Bratsas, Joseph Corneli, Wolfram Sperber, Michael Kohlhase, and Ioannis Antoniou. "Reimplementing the Mathematics Subject Classification (MSC) as a Linked Open Dataset". In: *Intelligent Computer Mathematics*. Conferences on Intelligent Computer Mathematics (CICM) (Bremen, Germany, July 9–14, 2012). Ed. by Johan Jeuring, John A. Campbell, Jacques Carette, Gabriel Dos Reis, Petr Sojka, Makarius Wenzel, and Volker Sorge. LNAI 7362. Springer Verlag, 2012, pp. 458–462. arXiv: 1204.5086 [cs.DL].
- [20] Carst Tankink, Christoph Lange, and Josef Urban. "Point-and-write Documenting Formal Mathematics by Reference". In: *Intelligent Computer Mathematics*. Conferences on Intelligent Computer Mathematics (CICM) (Bremen, Germany, July 9–14, 2012). Ed. by Johan Jeuring, John A. Campbell, Jacques Carette, Gabriel Dos Reis, Petr Sojka, Makarius Wenzel, and Volker Sorge. LNAI 7362. Springer Verlag, 2012, pp. 169–185. arXiv: 1204.5094 [cs.MS].
- [21] Serge Autexier, Catalin David, Dominik Dietrich, Michael Kohlhase, and Vyacheslav Zholudev. "Workflows for the Management of Change in Science, Technologies, Engineering and Mathematics". In: *Intelligent Computer Mathematics*. Ed. by James Davenport, William Farmer, Florian Rabe, and Josef Urban. LNAI 6824. Springer Verlag, 2011, pp. 164–179. ISBN: 978-3-642-22672-4. URL: http://kwarc.info/kohlhase/papers/planetary-moc.pdf.
- [22] Mihai Cîrlănaru, Deyan Ginev, and Christoph Lange. "Authoring and Publishing of Units and Quantities in Semantic Documents". In: The Semantic Web: ESWC 2011 Workshops. Workshops at the 8th Extended Semantic Web Conference (ESWC) (Hersonissos, Crete, Greece, May 29–30, 2011). Ed. by Raúl García Castro, Dieter Fensel, and Grigoris Antoniou. Lecture Notes in Computer Science 7117. Heidelberg: Springer Verlag, 2011, pp. 202–216. URL: http://kwarc.info/clange/pubs/eswc2011-units.pdf.
- [23] M. Codescu, F. Horozal, M. Kohlhase, T. Mossakowski, and F. Rabe. "A Proof Theoretic Interpretation of Model Theoretic Hiding". In: *Recent Trends in Algebraic Development Techniques*. Ed. by H. Kreowski and T. Mossakowski. Vol. 7137. Lecture Notes in Computer Science. Springer, 2011.
- [24] M. Codescu, F. Horozal, M. Kohlhase, T. Mossakowski, F. Rabe, and K. Sojakova. "Towards Logical Frameworks in the Heterogeneous Tool Set Hets". In: Recent Trends in Algebraic Development Techniques. Ed. by H. Kreowski and T. Mossakowski. Vol. 7137. Lecture Notes in Computer Science. Springer, 2011.
- [25] Mihai Codescu, Fulya Horozal, Michael Kohlhase, Till Mossakowski, and Florian Rabe. "Project Abstract: Logic Atlas and Integrator (LATIN)". In: Intelligent Computer Mathematics. Ed. by James Davenport, William Farmer, Florian Rabe, and Josef Urban. LNAI 6824. Springer Verlag, 2011, pp. 289–291. ISBN: 978-3-642-22672-4.
- [26] Deyan Ginev, Heinrich Stamerjohanns, and Michael Kohlhase. "The IATEXML Daemon: Editable Math on the Collaborative Web". In: Intelligent Computer Mathematics. Ed. by James Davenport, William Farmer, Florian Rabe, and Josef Urban. LNAI 6824. Springer Verlag, 2011, pp. 292–294. ISBN: 978-3-642-22672-4. URL: https://svn.kwarc.info/repos/arXMLiv/doc/cicm-systems11/paper.pdf.

- [27] F. Horozal, A. Iacob, C. Jucovschi, M. Kohlhase, and F. Rabe. "Combining Source, Content, Presentation, Narration, and Relational Representation". In: *Intelligent Computer Mathematics*. Ed. by J. Davenport, W. Farmer, F. Rabe, and J. Urban. Vol. 6824. Lecture Notes in Computer Science. Springer, 2011, pp. 211–226.
- [28] Fulya Horozal, Alin Iacob, Constantin Jucovschi, Michael Kohlhase, and Florian Rabe. "Combining Source, Content, Presentation, Narration, and Relational Representation". In: *Intelligent Computer Mathematics*. Ed. by James Davenport, William Farmer, Florian Rabe, and Josef Urban. LNAI 6824. Springer Verlag, 2011, pp. 212–227. ISBN: 978-3-642-22672-4.
- [29] Andrea Kohlhase and Michael Kohlhase. "Maintaining Islands of Consistency via Versioned Links". In: Proceedings of the 29th annual ACM international conference on Design of communication (SIGDOC). 2011, pp. 167-174. URL: http://kwarc.info/kohlhase/papers/sigdoc2011-verslinks.pdf.
- [30] Andrea Kohlhase and Michael Kohlhase. "Towards a Flexible Notion of Document Context". In: Proceedings of the 29th annual ACM international conference on Design of communication (SIGDOC). 2011, pp. 181–188. URL: http://kwarc.info/kohlhase/papers/sigdoc2011-flexiforms.pdf.
- [31] Michael Kohlhase, Florian Rabe, and Claudio Sacerdoti Coen. "A Foundational View on Integration Problems". In: *Intelligent Computer Mathematics*. Ed. by James Davenport, William Farmer, Florian Rabe, and Josef Urban. LNAI 6824. Springer Verlag, 2011, pp. 107–122. ISBN: 978-3-642-22672-4. URL: http://kwarc.info/kohlhase/submit/integration11.pdf.
- [32] Christoph Lange. "Krextor An Extensible Framework for Contributing Content Math to the Web of Data". In: *Intelligent Computer Mathematics*. Ed. by James Davenport, William Farmer, Florian Rabe, and Josef Urban. LNAI 6824. Springer Verlag, 2011, pp. 304–306. ISBN: 978-3-642-22672-4. URL: http://kwarc.info/clange/pubs/krextor-system.pdf.
- [33] Christoph Lange, Michael Kohlhase, Catalin David, Deyan Ginev, Andrea Kohlhase, Bogdan Matican, Stefan Mirea, and Vyacheslav Zholudev. "The Planetary System: Executable Science, Technology, Engineering and Math Papers". In: ESWC (Part II). 8th Extended Semantic Web Conference (ESWC) (Hersonissos, Crete, Greece, May 29–June 2, 2011). Ed. by Grigoris Antoniou, Marko Grobelnik, Elena Paslaru Bontas Simperl, Bijan Parsia, Dimitris Plexousakis, Pieter De Leenheer, and Jeff Z. Pan. Lecture Notes in Computer Science 6644. Heidelberg: Springer Verlag, 2011, pp. 471–475. ISBN: 978-3-642-21033-4. arXiv: 1103.1482 [cs.DL].

Standards and Accompanying Documentation

Technical Reports

- [34] Michael Kohlhase. CNXLATEX: A LATEX-based Syntax for Connexions Modules. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/cnx/cnx.pdf.
- [35] Michael Kohlhase. dcm.sty: An Infrastructure for marking up Dublin Core Metadata in LATEX documents. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/dcm/dcm.pdf.
- [36] Michael Kohlhase. *Editorial Notes for LATEX*. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012.

- [37] Michael Kohlhase. Preparing DFG Proposals and Reports in LATEX with dfgproposal.cls. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/get/macros/latex/contrib/proposal/dfg/dfgproposal.pdf.
- [38] Michael Kohlhase. Preparing FP7 EU Proposals and Reports in LATEX with euproposal.cls. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/get/macros/latex/contrib/proposal/eu/euproposal.pdf.
- [39] Michael Kohlhase. Preparing Proposals in LATEX with proposal.cls. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/get/macros/latex/contrib/proposal/base/proposal.pdf.
- [40] Michael Kohlhase. RDFa Metadata in LaTeX. Self-documenting LaTeX package. Comprehensive TeX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/rdfmeta/rdfmeta.pdf.
- [41] Michael Kohlhase. reqdoc.sty: Semantic Markup for Requirements Specification Documents. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/reqdoc/reqdoc.pdf.
- [42] Michael Kohlhase. sTeX: Semantic Markup in TEX/PTEX. Tech. rep. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/get/macros/latex/contrib/stex/sty/stex.pdf.
- [43] Michael Kohlhase. assignment.sty/cls: An Infrastructure for formatting Assignments and Exams. Self-documenting IATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/assignment/assignment.pdf.
- [44] Michael Kohlhase. cmathml.sty: A TEX/ETEX-based Syntax for Content MathML. Self-documenting EATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/cmathml/cmathml.pdf.
- [45] Michael Kohlhase. metakeys.sty: A generic framework for extensible Metadata in LATEX. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/metakeys/metakeys.pdf.
- [46] Michael Kohlhase. omdoc.sty/cls: Semantic Markup for Open Mathematical Documents in LATEX. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/omdoc/omdoc.pdf.
- [47] Michael Kohlhase. omtext: Semantic Markup for Mathematical Text Fragments in LATEX. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/omtext/omtext.pdf.
- [48] Michael Kohlhase. owl2onto.cls: Marking up OWL2 Ontologies in sTeX. Self-documenting IATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/owl2onto/owl2onto.pdf.
- [49] Michael Kohlhase. physml.sty: An Infrastructure for Marking Up PhysML in T_EX/P̄^AT_EX. Self-documenting Ī^AT_EX package. Comprehensive T_EX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/physml/physml.pdf.

- [50] Michael Kohlhase. problem.sty: An Infrastructure for formatting Problems. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/problem/problem.pdf.
- [51] Michael Kohlhase. sproof.sty: Structural Markup for Proofs. Self-documenting IATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/sproof/sproof.pdf.
- [52] Michael Kohlhase. sref.sty: Semantic Crossreferencing in LATEX. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/sref/sref.pdf.
- [53] Michael Kohlhase. statements.sty: Structural Markup for Mathematical Statements. Self-documenting IATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/statements/statements.pdf.
- [54] Michael Kohlhase. workaddress.sty: An Infrastructure for marking up Dublin Core Metadata in LATEX documents. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/workaddress/workaddress.pdf.
- [55] Michael Kohlhase and Deyan Ginev. presentation.sty: An Infrastructure for Presenting Semantic Macros in sTeX. Self-documenting LATEX package. Comprehensive TeX Archive Network (CTAN), 2012. URL: http://www.ctan.org/tex-archive/macros/latex/contrib/stex/presentation/presentation.pdf.
- [56] Michael Kohlhase, Deyan Ginev, and Rares Ambrus. modules.sty: Semantic Macros and Module Scoping in sTeX. Self-documenting LATEX package. Comprehensive TEX Archive Network (CTAN), 2012. URL: http://www.ctan.org/get/macros/latex/contrib/stex/modules/modules.pdf.
- [57] M. Iancu, M. Kohlhase, and F. Rabe. Translating the Mizar Mathematical Library into OMDoc format. Tech. rep. KWARC Report-01/11. Jacobs University Bremen, 2011.
- [58] Mihnea Iancu, Michael Kohlhase, and Florian Rabe. Translating the Mizar Mathematical Library into OMDoc format. KWARC Report. Jacobs University Bremen, 2011. URL: https://svn.omdoc.org/repos/latin/public/Mizar20MDoc-Report.pdf.

Theses

- [59] Catalin David. "Semantic Alliance Framework: Integrating Documents and Semantic Services". M. Sc. Thesis. Jacobs University Bremen, 2012. URL: https://svn.eecs.jacobs-university.de/svn/eecs/archive/msc-2012/cdavid.pdf.
- [60] S. Dumbrava. "A Type Theory based on Reflection". MA thesis. Jacobs University Bremen, 2012.
- [61] F. Horozal. "Management of Change in the Web Ontology Language". MA thesis. Jacobs University Bremen, 2012.
- [62] Mihnea Iancu. "Management of Change in Declarative Languages". MA thesis. Jacobs University Bremen, 2012.
- [63] Mihai Cîrlănaru. "Authoring, Publishing and Interacting with Units and Quantities in Technical Documents". B. Sc. Thesis. Jacobs University Bremen, 2011.
- [64] A. Iacob. "Towards Project-Based Workflows in Twelf". MA thesis. Jacobs University Bremen, 2011.
- [65] Christoph Lange. "Enabling Collaboration on Semiformal Mathematical Knowledge by Semantic Web Integration". PhD thesis. Jacobs University Bremen, 2011.

[66] Vladimir Zamdzhiev. "Universal OpenMath Machine". B. Sc. Thesis. Jacobs University Bremen, 2011.