

Report for the 2010/1 SES Evaluation

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Books

- [82] 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

additionally, ca. 15 proceedings of workshops appeared in the gray literature

Journal Articles

- [6] 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.
- [9] 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.
- [11] 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>.
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- [44] F. Rabe. “A Logical Framework Combining Model and Proof Theory”. In: *Mathematical Structures in Computer Science* (2012). to appear; see http://kwarc.info/frabe/Research/rabe_combining_10.pdf.
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- [49] S. Awodey and F. Rabe. “Kripke Semantics for Martin-Löf’s Extensional Type Theory”. In: *Logical Methods in Computer Science* 7.3 (2011).

- [59] F. Horozal and F. Rabe. “Representing Model Theory in a Type-Theoretical Logical Framework”. In: *Theoretical Computer Science* 412.37 (2011), pp. 4919–4945.
- [65] Mihnea Iancu and Florian Rabe. “Formalizing Foundations of Mathematics”. In: *Mathematical Structures in Computer Science* 21.4 (2011), pp. 883–911.
- [80] 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 Mitsuhiro 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

- [42] 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)

- [2] 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>.
- [5] 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>.
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- [43] 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>.
- [48] 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>.
- [51] 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.
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- [66] Andrea Kohlhase and Constantin Jucovschi. “planMP:Collecting Mathematical Practices for MKM”. In: *Intelligent Computer Mathematics – Work in Progress Papers*. Ed. by James Davenport, William Farmer, Florian Rabe, and Josef Urban. 2011.
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- [69] 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>.

- [79] 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>.
- [84] 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].

additionally, ca. 40 contributions to international workshops (mostly peer reviewed)

Standards and Accompanying Documentation

Theses

- [1] 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>.
- [50] Mihai Cîrlănu. “Authoring, Publishing and Interacting with Units and Quantities in Technical Documents”. B.Sc. Thesis. Jacobs University Bremen, 2011.
- [81] Christoph Lange. “Enabling Collaboration on Semiformal Mathematical Knowledge by Semantic Web Integration”. PhD thesis. Jacobs University Bremen, 2011.
- [89] Vladimir Zamdzhiev. “Universal OpenMath Machine”. B.Sc. Thesis. Jacobs University Bremen, 2011.