

Curriculum Vitae

Personal data and current position

Born 9th November 1965 in Erlangen, Germany. Married, three children.

Full professor for Informatics (“Theoretical Computer Science”) at the Institut für Informatik at the Ludwig-Maximilians-Universität München, since September 2001.

Homepage: <http://www.tcs.informatik.uni-muenchen.de/~mhofmann>

Undergraduate education

Undergraduate studies in Informatics at the Universität Erlangen-Nürnberg Germany: November 1984 – August 1991. Completed with Diplom in Informatics “mit Auszeichnung” (with distinction).

Undergraduate studies in Mathematics and Informatics at the Université de Nice, France: October 1987 – June 1988. Completed with “Maitrise de Mathematiques”.

Professional career

Current position since September 2001.

Assistant Professor for Mathematics, University of Darmstadt, April 2001 – September 2001.

Lecturer then Reader at the School of Informatics, University of Edinburgh, April 1998 – April 2001.

Research assistant in the Department of Mathematics of Darmstadt University. September 1995 – March 1998. Habilitation on Type systems for polynomial time computation, February 1999. Referees: Prof. Phil Scott, Ottawa, Prof. David Basin, Zurich.

EU HCM fellow May 1993 – April 1995.

Research assistant at the LFCS, University of Edinburgh: October 1991 – April 1993.

PhD studies at LFCS, University of Edinburgh under Profs. Don Sannella und Gordon Plotkin: October 1991 – June 1995. Dissertation (PhD) “Extensional concepts in intensional type theory”: June 1995.

Research interests

My research area is applications of logic and type theory to programming and programming languages. For the last ten years, my main interest has been the analysis of resource consumption of programs both theoretically and practically. The main contributions are:

Functional languages (calculi) whose expressive power coincides with a particular complexity class;

Type systems for the concrete memory usage of functional and object-oriented programs;

Applications in externally-funded projects to mobile code and embedded systems

Language-based approaches to complexity-theoretic questions; in particular the study of the expressive power of programs that model pointers as an abstract data type.

Identity in dependent type theory

Other methodically related research includes semantics of higher-order abstract syntax; completeness of sequent calculi. Earlier works include type systems for and verification of class-based object-oriented programming, axiomatisations of callcc-like control operators. Current and future work includes type systems for enforcing programming guidelines for secure web programming, provably correct compiler transformations with higher-order store and dynamically allocated data structures. Automatic resource inference for object-oriented programs (joint work with PhD-students funded by DFG graduate school PUMA); foundational work on the relationship between NLOGSPACE and PTIME in the context of programming languages.

Grants

DFG project GuideForce on type-based enforcement of secure coding guidelines. Nov. 2014 – Oct. 2017. EUR 270k.

Co-proposer of DFG Graduate school Programm- und Modellanalyse (PUMA) (program and model analysis). Currently in the second period Aug. 2013 – July 2017. Funding for 12 PhD scholarships plus travel, invited speakers, and overhead. Within PUMA, I currently supervise three PhD Students funded by PUMA (Stephan Barth, Sabine Bauer, Christoph-Simon Senjak). First period Aug. 2008 – July 2013.

DFG Project PURPLE (Pointers as an abstract data type: complexity-theoretic and programming-language aspects). June 2011 – May 2014.

DFG Project Poly-NI (Verification of polymorphic noninterference for mobile code). Oct. 2010 – July 2013. EUR 250k

Work package leader and co-proposer of EU Project EmBounded (Resource analysis for embedded systems). June 2005 – Sep. 2010. Local budget EUR400k.

Work package leader and co-proposer of EU Project MOBIUS (Proofcarrying code for Mobility, Ubiquity, and Security) Sep. 2005 – Aug. 2009. Local Budget: EUR 700k.

DFG Project ProPlatz (Programming-language aspects of sublinear space complexity). Oct. 2005 – Sep. 2008. Ca. EUR 250k.

Coordinator of EU working group APPSEM2 (Applied Semantics), March 2003 – Feb. 2005. Total budget EUR 500k.

Work package leader and co-proposer of EU Project MRG (Mobile resource guarantees), MRG. Jan. 2002 – Dec. 2004. Local Budget EUR 500k.

Principal Investigator of EPSRC Project “Type Systems for Resource- Bounded Programming and Compilation” (£140k) May 2000 – April 2002.

Invited talks

Invited talk on “Computing with a fixed numbers of pointers”, FSTTCS, Guwahati, India, December 2013.

Invited talk on “Ten Years of Amortized Resource Analysis”, FoSSaCS, Rome, March 2013.

Invited Lecturer at the Winter School on Logic and Interactions, Feb. 2012, Luminy, France.

Lecturer at the Estonian Winter School Feb. 2011, Palmse, Estonia.

Invited talk at SAP Research (Sophia Antipolis), 19th March 2010. Verifying Pointer and String Analyses with Type Systems.

Invited talk at LCC 2009 (Los Angeles) Pure pointer programs and LOGSPACE.

Invited talk at Mathematisches Kolloquium of TU Darmstadt: Pointer Programs, 2008.

Invited talk at Trustworthy Global Computing (TGC 2007): Ghost variables, resources, and object invariants in program logics.

Lecturer at the Global Computing Summer school Warsaw, Sep. 2008.

Lecturer at the Marktoberdorf Summer school 2005 and 2007.

Invited talk at the Logic Colloquium 2006, Nijmegen.

Keynote speaker at the conference ICALP 2004, Turku: “What Do Program Logics and Type Systems Have in Common?”.

Invited talk on “Certification of Memory Usage” at ISTTCS, Bertinoro, October 2003.

Invited talk on Mobile Resource Guarantees at the workshop FMM (Formal Methods for Mobility), Marseille, September 2003.

Lecturer at the EEF Global Computing Summer School, Edinburgh, Juli 2003.

Invited talk on “A resource-aware program logic” at the workshop FGC (Foundations of Global Computing), Eindhoven, September 2003.

Invited talk on “Functional programming without garbage-collection and resource certification” at the workshop PPL 2002, Japan, March 2002.

Keynote speaker at MFCS 2001: “The strength of non size-increasing computation”

Invited talk on “From bounded arithmetic to memory management” at Typed Lambda Calculus and Applications (TLCA), Warsaw, June 2001.

Invited talk at the Logic Colloquium, Paris, July 2000.

Lecturer at the European Summer School in Logic, Language, and Information, Birmingham, August 2000.

Invited talk on “Type systems for polynomial time” at the workshop Implicit Computational Complexity in Programming Language Design and Methodology, Trento, June 1999.

Invited talk on “Linear types and non-size-increasing polynomial time computation” at the British Colloquium for Theoretical Computer Science (BCTCS), April 1999.

Invited talk at the workshop Implicit Computational Complexity in Programming Language Design and Methodology, Baltimore, September 1998.

Invited talk on “Safe recursion at higher types and linear combinatory algebra” at the workshop Proof Theory and Complexity, Aarhus, August 1998. Two invited lectures on “Models of Subtyping” at Indiana University, Bloomington, Feb. 1997.

Lecturer at the Newton Institute summer school on Semantics and Logics of Computation, Cambridge, Sep. 1996.

Invited talk on “The groupoid interpretation of Martin-Löf type theory” at the symposium *Twenty five years of constructive type theory*, Venice, 1995.

Invited talk at Colloque Luminy, Marseille, France, “On the Interpretation of Martin-Löf type theory in locally-cartesian closed categories”, 1995.

Further Information

Member of the editorial board of Theoretical Computer Science, since 2009.

Elected chairman of GI working group logic in computer science, 2006 – 2013

Elected chairman of the Institute of Informatics of LMU München 2007 – 2010.

Program Chair of the conferences TLCA (2003), CTCS (1999), FOSSACS (2011).

Program committee memberships: POPL (2015, 2009, 2005), ESOP (2014, 2009), STACS (2014, 2007), LICS (2015, 2013, 2004, 2000), CSR (2010), CSL (2015, 2010, 2005), TCS (2008), FOSSACS (2008, 2001), APLAS (2007), FLOPS (2004), ICALP (2004), FSTTCS (2002), TACS (2001).

Co-organiser of Dagstuhl seminars “Types, Logics and Semantics for State” Sep. 2004, Aug. 2010.

General Chair of the conference Principles of Programming Languages (POPL) 2007.

Co-organiser of Dagstuhl Seminar “Dependently typed Programming”, Sep. 2004.

Invited observer at IFIP Working Groups 1.3 (Foundations of Systems Specifications), 2.3 (Programming Methodology), 2.8 (Functional Programming).

Reviewing for numerous journals and conferences, e.g.: Journal of Functional Programming, Toplas, Journal of the ACM, Mathematical Structures in Computer Science, Journal of Symbolic Logic, Journal of Automated Reasoning, Symposium on Logic in Computer Science, Symposium on Principles of Programming Languages.

Reviewer for EPSRC (.uk), DFG (.de), NWO (.nl)

Invited research stays: Univ. Edinburgh, Univ. Lyon, Microsoft Research, Univ. Paris 13, SRI International, Mittag-Leffler Institute, Sweden, Indiana University, LIRM Montpellier.

BCS distinguished dissertation award 1995.

Current PhD students: Sabine Bauer, Christoph-Simon Senjak, Stephan Barth

Former PhD students: Andreas Abel, Roland Axelsson, Freiric Barral, Felix Fischer, Oliver Friedmann, Robert Grabowski, Jan Hoffmann, Steffen Jost, Dulma Rodriguez, Francis Tang, Rene Vestergaard, Conor McBride (with Rod Burstall), Jo Hannay (with Don Sannella).

Publications

Martin Hofmann has published over 100 articles in refereed journals and conferences proceedings and is the author of two books. His google scholar profile at <http://scholar.google.de/citations?user=MuxVKIMAAAAJ&hl=de> provides access to online copies and citations.

BOOKS

1. Martin Hofmann, Martin Lange, “Automatentheorie und Logik” eXamen.press, Springer, 2011.
2. Martin Hofmann, “Extensional constructs in intensional type theory”, Springer, 1997.

BOOK CHAPTERS

1. David Aspinall and Martin Hofmann, “Dependent Types” In Advanced topics in types and programming languages, pp. 45-86, MIT Press, 2005.
2. Martin Hofmann, “Syntax and Semantics of Dependent Types” In Semantics and Logics of Computation, pp. 79–130, Cambridge University Press, 1997.

REFEREED JOURNAL ARTICLES

1. Pierre-Louis Curien, Richard Garner, Martin Hofmann: Revisiting the categorical interpretation of dependent type theory. *Theor. Comput. Sci.* 546: 99-119, 2014.
2. Lennart Beringer, Robert Grabowski, Martin Hofmann, “Verifying pointer and string analyses with region type systems”, In *Computer Languages, Systems & Structures*, vol. 39, no. 2, pp. 49-65, 2013.
3. Jan Hoffmann, Klaus Aehlig, Martin Hofmann, “Multivariate amortized resource analysis”, In *ACM Trans. Program. Lng. Syst.*, vol. 34, no. 3, pp. 14, 2012.
4. Ugo Dal Lago, Martin Hofmann, “Realizability models and implicit complexity”, In *Theor. Comput. Sci.*, vol. 412, no. 20, pp. 2029-2047, 2011.
5. Martin Hofmann, Ulrich Schöpp, “Pure pointer programs with iteration”, In *ACM Trans. Comput. Log.*, vol. 11, no. 4, 2010.
6. Ugo Dal Lago, Martin Hofmann, “A Semantic Proof of Polytime Soundness of Light Affine Logic”, In *Theory Comput. Syst.*, vol. 46, no. 4, pp. 673-689, 2010.

7. Ugo Dal Lago, Martin Hofmann, “Bounded Linear Logic, Revisited”, In *Logical Methods in Computer Science*, vol. 6, no. 4, 2010.
8. David Aspinall, Martin Hofmann, Michal Konečný, “A type system with usage aspects”, In *J. Funct. Program.*, vol. 18, no. 2, pp. 141-178, 2008.
9. Ulrich Schöpp, Martin Hofmann, “Pointer Programs and Undirected Reachability”, In *Electronic Colloquium on Computational Complexity (ECCC)*, vol. 15, no. 090, 2008.
10. David Aspinall, Lennart Beringer, Martin Hofmann, Hans-Wolfgang Loidl, Alberto Momigliano, “A program logic for resources”, In *Theor. Comput. Sci.*, vol. 389, no. 3, pp. 411-445, 2007.
11. Martin Hofmann, Hans-Wolfgang Loidl, “Preface”, In *Theor. Comput. Sci.*, vol. 364, no. 3, pp. 271-272, 2006.
12. Anna Bucalo, Furio Honsell, Marino Miculan, Ivan Scagnetto, Martin Hofmann, “Consistency of the theory of contexts”, In *J. Funct. Program.*, vol. 16, no. 3, pp. 327-372, 2006.
13. Martin Hofmann, Jaap van Oosten, Thomas Streicher, “Well-foundedness in Realizability”, In *Arch. Math. Log.*, vol. 45, no. 7, pp. 795-805, 2006.
14. Martin Hofmann, Pawel Urzyczyn, “Typed Lambda Calculi and Applications 2003, Selected Papers”, In *Fundam. Inform.*, vol. 65, no. 1-2, 2005.
15. Martin Hofmann, Philip J. Scott, “Realizability models for BLL-like languages”, In *Theor. Comput. Sci.*, vol. 318, no. 1-2, pp. 121-137, 2004.
16. Klaus Aehlig, Ulrich Berger, Martin Hofmann, Helmut Schwichtenberg, “An arithmetic for non-size-increasing polynomial-time computation”, In *Theor. Comput. Sci.*, vol. 318, no. 1-2, pp. 3-27, 2004.
17. Martín Hötzel Escardó, Martin Hofmann, Thomas Streicher, “On the non-sequential nature of the interval-domain model of real-number computation”, In *Mathematical Structures in Computer Science*, vol. 14, no. 6, pp. 803-814, 2004.
18. Jirí Adámek, Martín Hötzel Escardó, Martin Hofmann, “Preface”, In *Theor. Comput. Sci.*, vol. 294, no. 1/2, pp. 1, 2003.
19. Martin Hofmann, “Linear types and non-size-increasing polynomial time computation”, In *Inf. Comput.*, vol. 183, no. 1, pp. 57-85, 2003.
20. Stephen Bellantoni, Martin Hofmann, “A New ”Feasible” Arithmetic”, In *J. Symb. Log.*, vol. 67, no. 1, pp. 104-116, 2002.
21. Martin Hofmann, Thomas Streicher, “Completeness of Continuation Models for lambda-mu-Calculus”, In *Inf. Comput.*, vol. 179, no. 2, pp. 332-355, 2002.
22. Martin Hofmann, Benjamin C. Pierce, “Type Destructors”, In *Inf. Comput.*, vol. 172, no. 1, pp. 29-62, 2002.
23. Martin Hofmann, “Programming languages capturing complexity classes”, In *SIGACT News*, vol. 31, no. 1, pp. 31-42, 2000.
24. Martin Hofmann, “A Type System for Bounded Space and Functional In-Place Update”, In *Nord. J. Comput.*, vol. 7, no. 4, pp. 258-289, 2000.

25. Martin Hofmann, “Safe recursion with higher types and BCK-algebra”, In *Ann. Pure Appl. Logic*, vol. 104, no. 1-3, pp. 113-166, 2000.
26. Thierry Coquand, Martin Hofmann, “A new method for establishing conservativity of classical systems over their intuitionistic version”, In *Mathematical Structures in Computer Science*, vol. 9, no. 4, pp. 323-333, 1999.
27. Martin Hofmann, “Semantics of Linear/Modal Lambda Calculus”, In *J. Funct. Program.*, vol. 9, no. 3, pp. 247-277, 1999.
28. Martin Hofmann, Wolfgang Naraschewski, Martin Steffen, Terry Stroup, “Inheritance of Proofs”, In *TAPOS*, vol. 4, no. 1, pp. 51-69, 1998.
29. Martin Hofmann, “An application of category-theoretic semantics to the characterisation of complexity classes using higher-order function algebras”, In *Bulletin of Symbolic Logic*, vol. 3, no. 4, pp. 469-486, 1997.
30. Martin Hofmann, Donald Sannella, “On Behavioural Abstraction and Behavioural Satisfaction in Higher-Order Logic”, In *Theor. Comput. Sci.*, vol. 167, no. 1&2, pp. 3-45, 1996.
31. Martin Hofmann, Benjamin C. Pierce, “Positive Subtyping”, In *Inf. Comput.*, vol. 126, no. 1, pp. 11-33, 1996.
32. Martin Hofmann, “Sound and Complete Axiomatisations of Call-by-Value Control Operators”, In *Mathematical Structures in Computer Science*, vol. 5, no. 4, pp. 461-482, 1995.
33. Martin Hofmann, Benjamin C. Pierce, “A Unifying Type-Theoretic Framework for Objects”, In *J. Funct. Program.*, vol. 5, no. 4, pp. 593-635, 1995.

PAPERS IN REFEREED PROCEEDINGS OF INTERNATIONAL CONFERENCES

1. Martin Hofmann, Georg Moser: Amortised Resource Analysis and Typed Polynomial Interpretations. *RTA-TLCA 2014*: 272-286
2. Martin Hofmann, Wei Chen: Abstract interpretation from Büchi automata. *CSL-LICS 2014*: 51
3. Gordon Cichon, Martin Hofmann: Formal Semantics of Synchronous Transfer Architecture. *Modellierung 2014*: 257-272
4. Nick Benton, Martin Hofmann, Vivek Nigam: Abstract effects and proof-relevant logical relations. *POPL 2014*: 619-632.
5. Nick Benton, Martin Hofmann, Vivek Nigam, “Proof-Relevant Logical Relations for Name Generation”, In *TLCA*, Springer LNCS, vol. 7941, pp. 48-60, 2013.
6. Martin Hofmann, Ramyaa Ramyaa, Ulrich Schöpp, “Pure Pointer Programs and Tree Isomorphism”, In *FoSSaCS*, Springer LNCS, vol. 7794, pp. 321-336, 2013.
7. Andrej Bauer, Martin Hofmann, Aleksandr Karbyshev, “On Monadic Parametricity of Second-Order Functionals”, In *FoSSaCS*, Springer LNCS, vol. 7794, pp. 225-240, 2013.
8. Martin Hofmann, Dulma Rodriguez, “Automatic Type Inference for Amortised Heap-Space Analysis”, In *ESOP*, Springer LNCS, vol. 7792, pp. 593-613, 2013.

9. Stephan Barth, Martin Hofmann, “Learn with SAT to Minimize Büchi Automata”, In GandALF, vol. 96, pp. 71-84, 2012.
10. Martin Hofmann, Benjamin C. Pierce, Daniel Wagner, “Edit lenses”, In POPL, ACM, pp. 495-508, 2012.
11. Martin Hofmann, Dulma Rodriguez, “Linear Constraints over Infinite Trees”, In LPAR, Springer LNCS, vol. 7180, pp. 343-358, 2012.
12. Jan Hoffmann, Klaus Aehlig, Martin Hofmann, “Resource Aware ML”, In CAV, Springer LNCS, vol. 7358, pp. 781-786, 2012.
13. Martin Hofmann, Benjamin C. Pierce, Daniel Wagner, “Symmetric lenses”, In POPL, ACM, pp. 371-384, 2011.
14. Jan Hoffmann, Klaus Aehlig, Martin Hofmann, “Multivariate amortized resource analysis”, In POPL, ACM, pp. 357-370, 2011.
15. Robert Grabowski, Martin Hofmann, Keqin Li, “Type-Based Enforcement of Secure Programming Guidelines - Code Injection Prevention at SAP”, In Formal Aspects in Security and Trust, Springer LNCS, vol. 7140, pp. 182-197, 2011.
16. Martin Hofmann, Aleksandr Karbyshev, Helmut Seidl, “Verifying a Local Generic Solver in Coq”, In SAS, Springer LNCS, vol. 6337, pp. 340-355, 2010.
17. Patrick Baillot, Martin Hofmann, “Type inference in intuitionistic linear logic”, In PPDP, ACM, pp. 219-230, 2010.
18. Steffen Jost, Kevin Hammond, Hans-Wolfgang Loidl, Martin Hofmann, “Static determination of quantitative resource usage for higher-order programs”, In POPL, ACM, pp. 223-236, 2010.
19. Lennart Beringer, Robert Grabowski, Martin Hofmann, “Verifying Pointer and String Analyses with Region Type Systems”, In LPAR (Dakar), Springer LNCS, vol. 6355, pp. 82-102, 2010.
20. Martin Hofmann, Aleksandr Karbyshev, Helmut Seidl, “What Is a Pure Functional?”, In ICALP (2), Springer LNCS, vol. 6199, pp. 199-210, 2010.
21. Jan Hoffmann, Martin Hofmann, “Amortized Resource Analysis with Polynomial Potential”, In ESOP, Springer LNCS, vol. 6012, pp. 287-306, 2010.
22. Jan Hoffmann, Martin Hofmann, “Amortized Resource Analysis with Polymorphic Recursion and Partial Big-Step Operational Semantics”, In APLAS, Springer LNCS, vol. 6461, pp. 172-187, 2010.
23. Ugo Dal Lago, Martin Hofmann, “Bounded Linear Logic, Revisited”, In TLCA, Springer LNCS, vol. 5608, pp. 80-94, 2009.
24. Nick Benton, Andrew Kennedy, Lennart Beringer, Martin Hofmann, “Relational semantics for effect-based program transformations: higher-order store”, In PPDP, ACM, pp. 301-312, 2009.
25. Martin Hofmann, Ulrich Schöpp, “Pointer Programs and Undirected Reachability”, In LICS, IEEE Computer Society, pp. 133-142, 2009.

26. Steffen Jost, Hans-Wolfgang Loidl, Kevin Hammond, Norman Scaife, Martin Hofmann, “Carbon Credits” for Resource-Bounded Computations Using Amortised Analysis”, In FM, Springer LNCS, vol. 5850, pp. 354-369, 2009.
27. Martin Hofmann, Dulma Rodriguez, “Efficient Type-Checking for Amortised Heap-Space Analysis”, In CSL, Springer LNCS, vol. 5771, pp. 317-331, 2009.
28. Murdoch James Gabbay, Martin Hofmann, “Nominal Renaming Sets”, In LPAR, Springer LNCS, vol. 5330, pp. 158-173, 2008.
29. Amal Ahmed, Nick Benton, Martin Hofmann, Greg Morrisett, “08061 Abstracts Collection – Types, Logics and Semantics for State”, In Types, Logics and Semantics for State, Internationales Begegnungs- und Forschungszentrum fuer Informatik (IBFI), Schloss Dagstuhl, Germany, vol. 08061, 2008.
30. Amal Ahmed, Nick Benton, Martin Hofmann, Greg Morrisett, “08061 Executive Summary – Types, Logics and Semantics for State”, In Types, Logics and Semantics for State, Internationales Begegnungs- und Forschungszentrum fuer Informatik (IBFI), Schloss Dagstuhl, Germany, vol. 08061, 2008.
31. Ugo Dal Lago, Martin Hofmann, “A Semantic Proof of Polytime Soundness of Light Affine Logic”, In CSR, Springer LNCS, vol. 5010, pp. 134-145, 2008.
32. Martin Hofmann, Ulrich Schöpp, “Pure Pointer Programs with Iteration”, In CSL, Springer LNCS, vol. 5213, pp. 79-93, 2008.
33. Masahito Hasegawa, Martin Hofmann, Gordon D. Plotkin, “Finite Dimensional Vector Spaces Are Complete for Traced Symmetric Monoidal Categories”, In Pillars of Computer Science, Springer LNCS, vol. 4800, pp. 367-385, 2008.
34. Martin Hofmann, Mariela Pavlova, “Elimination of Ghost Variables in Program Logics”, In TGC, Springer LNCS, vol. 4912, pp. 1-20, 2007.
35. Nick Benton, Andrew Kennedy, Lennart Beringer, Martin Hofmann, “Relational semantics for effect-based program transformations with dynamic allocation”, In PPDP, ACM, pp. 87-96, 2007.
36. Lennart Beringer, Martin Hofmann, Mariela Pavlova, “Certification Using the Mobius Base Logic”, In FMCO, Springer LNCS, vol. 5382, pp. 25-51, 2007.
37. Lennart Beringer, Martin Hofmann, “Secure information flow and program logics”, In CSF, IEEE Computer Society, pp. 233-248, 2007.
38. Kevin Hammond, Christian Ferdinand, Reinhold Heckmann, Roy Dyckhoff, Martin Hofmann, Steffen Jost, Hans-Wolfgang Loidl, Greg Michaelson, Robert F. Pointon, Norman Scaife, Jocelyn Sérot, Andy Wallace, “Towards Formally Verifiable WCET Analysis for a Functional Programming Language”, In WCET, Internationales Begegnungs- und Forschungszentrum fuer Informatik (IBFI), Schloss Dagstuhl, Germany, vol. 4, 2006.
39. Gilles Barthe, Lennart Beringer, Pierre Crégut, Benjamin Grégoire, Martin Hofmann, Peter Müller, Erik Poll, Germán Puebla, Ian Stark, Eric Vétillard, “MOBIUS: Mobility, Ubiquity, Security”, In TGC, Springer LNCS, vol. 4661, pp. 10-29, 2006.
40. Christian Dax, Martin Hofmann, Martin Lange, “A Proof System for the Linear Time μ -Calculus”, In FSTTCS, Springer LNCS, vol. 4337, pp. 273-284, 2006.

41. Martin Hofmann, Steffen Jost, "Type-Based Amortised Heap-Space Analysis", In ESOP, Springer LNCS, vol. 3924, pp. 22-37, 2006.
42. Lennart Beringer, Martin Hofmann, "A Bytecode Logic for JML and Types", In APLAS, Springer LNCS, vol. 4279, pp. 389-405, 2006.
43. Nick Benton, Andrew Kennedy, Martin Hofmann, Lennart Beringer, "Reading, Writing and Relations", In APLAS, Springer LNCS, vol. 4279, pp. 114-130, 2006.
44. Donald Sannella, Martin Hofmann, David Aspinall, Stephen Gilmore, Ian Stark, Lennart Beringer, Hans-Wolfgang Loidl, Kenneth MacKenzie, Alberto Momigliano, Olha Shkaravska, "Mobile Resource Guarantees (project evaluation paper)", In Trends in Functional Programming, Intellect, vol. 6, pp. 211-226, 2005.
45. Kevin Hammond, Roy Dyckhoff, Christian Ferdinand, Reinhold Heckmann, Martin Hofmann, Steffen Jost, Hans-Wolfgang Loidl, Greg Michaelson, Robert F. Pointon, Norman Scaife, Jocelyn Sérot, Andy Wallace, "The Embounded project (project start paper)", In Trends in Functional Programming, Intellect, vol. 6, pp. 195-210, 2005.
46. Martin Hofmann, "Proof-Theoretic Approach to Description-Logic", In LICS, IEEE Computer Society, pp. 229-237, 2005.
47. Ugo Dal Lago, Martin Hofmann, "Quantitative Models and Implicit Complexity", In FSTTCS, Springer LNCS, vol. 3821, pp. 189-200, 2005.
48. David Aspinall, Lennart Beringer, Martin Hofmann, Hans-Wolfgang Loidl, Alberto Momigliano, "A Program Logic for Resource Verification", In TPHOLS, Springer LNCS, vol. 3223, pp. 34-49, 2004.
49. Lennart Beringer, Martin Hofmann, Alberto Momigliano, Olha Shkaravska, "Automatic Certification of Heap Consumption", In LPAR, Springer LNCS, vol. 3452, pp. 347-362, 2004.
50. Martin Hofmann, "What Do Program Logics and Type Systems Have in Common?", In ICALP, Springer LNCS, vol. 3142, pp. 4-7, 2004.
51. David Aspinall, Stephen Gilmore, Martin Hofmann, Donald Sannella, Ian Stark, "Mobile Resource Guarantees for Smart Devices", In CASSIS, Springer LNCS, vol. 3362, pp. 1-26, 2004.
52. Martin Hofmann, Steffen Jost, "Static prediction of heap space usage for first-order functional programs", In POPL, ACM, pp. 185-197, 2003.
53. Martin Hofmann, "Certification of Memory Usage", In ICTCS, Springer LNCS, vol. 2841, pp. 21, 2003.
54. Martin Hofmann, "The strength of non-size increasing computation", In POPL, ACM, pp. 260-269, 2002.
55. David Aspinall, Martin Hofmann, "Another Type System for In-Place Update", In ESOP, Springer LNCS, vol. 2305, pp. 36-52, 2002.
56. Martin Hofmann, "The Strength of Non-size-increasing Computation (Introduction and Summary)", In MFCS, Springer LNCS, vol. 2136, pp. 58-61, 2001.

57. Thorsten Altenkirch, Peter Dybjer, Martin Hofmann, Philip J. Scott, “Normalization by Evaluation for Typed Lambda Calculus with Coproducts”, In LICS, IEEE Computer Society, pp. 303-310, 2001.
58. Martin Hofmann, Francis Tang, “Implementing a Program Logic of Objects in a Higher-Order Logic Theorem Prover”, In TPHOLS, Springer LNCS, vol. 1869, pp. 268-282, 2000.
59. Martin Hofmann, “A Type System for Bounded Space and Functional In-Place Update–Extended Abstract”, In ESOP, Springer LNCS, vol. 1782, pp. 165-179, 2000.
60. Martin Hofmann, “Linear Types and Non-Size-Increasing Polynomial Time Computation”, In LICS, IEEE Computer Society, pp. 464-473, 1999.
61. Martin Hofmann, “Semantical Analysis of Higher-Order Abstract Syntax”, In LICS, IEEE Computer Society, pp. 204-213, 1999.
62. Martin Hofmann, Thomas Streicher, “Continuation Models are Universal for Lambda-Mu-Calculus”, In LICS, IEEE Computer Society, pp. 387-395, 1997.
63. Martin Hofmann, “A Mixed Modal/Linear Lambda Calculus with Applications to Bellantoni-Cook Safe Recursion”, In CSL, Springer LNCS, vol. 1414, pp. 275-294, 1997.
64. Thorsten Altenkirch, Martin Hofmann, Thomas Streicher, “Reduction-Free Normalisation for a Polymorphic System”, In LICS, IEEE Computer Society, pp. 98-106, 1996.
65. Martin Hofmann, “Conservativity of Equality Reflection over Intensional Type Theory”, In TYPES, Springer LNCS, vol. 1158, pp. 153-164, 1995.
66. Martin Hofmann, “A Simple Model for Quotient Types”, In TLCA, Springer LNCS, vol. 902, pp. 216-234, 1995.
67. Martin Hofmann, Donald Sannella, “On Behavioral Abstraction and Behavioural Satisfaction in Higher-Order Logic”, In TAPSOFT, Springer LNCS, vol. 915, pp. 247-261, 1995.
68. Martin Hofmann, Benjamin C. Pierce, “Positive Subtyping”, In POPL, ACM Press, pp. 186-197, 1995.
69. Thorsten Altenkirch, Martin Hofmann, Thomas Streicher, “Categorical Reconstruction of a Reduction Free Normalization Proof”, In Category Theory and Computer Science, Springer LNCS, vol. 953, pp. 182-199, 1995.
70. Martin Hofmann, Benjamin C. Pierce, “A Unifying Type-Theoretic Framework for Objects”, In STACS, Springer LNCS, vol. 775, pp. 251-262, 1994.
71. Martin Hofmann, Thomas Streicher, “The Groupoid Model Refutes Uniqueness of Identity Proofs”, In LICS, pp. 208-212, 1994.
72. Martin Hofmann, “On the Interpretation of Type Theory in Locally Cartesian Closed Categories”, In CSL, Springer LNCS, vol. 933, pp. 427-441, 1994.
73. Martin Hofmann, “Elimination of Extensionality in Martin-Löf Type Theory”, In TYPES, Springer LNCS, vol. 806, pp. 166-190, 1993.