

## **Prof Dr. Burkhardt Wolff**

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To whom it may concern.

here are the documents for a „blind“ application..

Best regards,

Burkhardt Wolff

### **Attachments:**

- Summary
- CV
- Publications  
(Books, proceedings, articles in Journals, Conferences, Workshops)
- Teaching experience
- Membership in program committees and scientific organizations
- Other

## Summary:

My research interests are in the field of modeling and model-based software development as well as quality assurance by validation and verification. In particular, my research has been focussed on the integration of formal foundations and proof techniques into the model-driven engineering approach (MDE) and model-based testing techniques into software development. This captures the foundation of specification and programming languages and the construction of correct tools – based on interactive and automated theorem proving techniques – in order to support these activities during design, verification and systematic test.

Particular application fields of these techniques have been models of operating systems and their security mechanisms.

Here is a list of current and recent research projects I am involved in:

- I was invited researcher in the FSE group (headed by Dr. Wolfram Schulte) at Microsoft Research, Redmond, USA. I investigated ways of an extension of the existing Boogie-Codeverification Tool for the programming language C with interactive proof techniques supported by Isabelle/HOL. With the new Isabelle/HOL backend of Boogie, I was able to prove some challenge problems that could not be proven automatically. I was able to integrate a verified C memory model into an automated prover used for the discharge of verification conditions generated from annotated C code. The system is used in the Verisoft/HyperVisor project (also funded by the BMBF). Meanwhile, I work as senior researcher within this project at the University of Saarbrücken.
- As leader of the project "Formal Testing Techniques" (ETH 17301), I developed (together with Achim Brucker) a test-case generation system (HOL-TestGen) which derives from formal specifications in higher-order logic (HOL) concrete test-drivers (in SML) performing black-box, grey-boy and sequence test. Our tool has been applied in quite substantial such as firewall-tests.(See also section "Tutorials".)
- As project leader of the "Modelling and Verification in UML/OCL" project (ETH 17305), I developed a formal semantics of the object-oriented specification modelling language UML/OCL and implemented it in Isabelle/HOL. This includes the development of first proof calculi and decision procedures for OCL. The overall goal of the project is to generate from class-diagrams annotated with OCL test cases for components and subsystems. As local project leader of the EU-IP TrustCoM (<http://www.eu-trustcom.com/>, ETH13581), I developed (together with Jürgen Doser) a *model-driven engineering* approach for security in web-based services.
- In a former project, I co-initiated the FSA-project (funded by the *Deutsche Forschungsgemeinschaft* (DFG)), where the *modelling* and *verification* of security architectures and their implementation via concrete security technologies in distributed Client-Server Software systems. As a contribution to the project, I developed a tool (HOL-Z, a conservative embedding of the Z-language in Isabelle/HOL together with special proof support for refinement proofs) and performed a substantial case study on it, namely *CVS-Server*. Recently, I used HOL-Z for an industrial verification case study in the field of applied computer security.

I have a long-standing interest in new teaching techniques (e.g. in e-learning). Together with David Basin, I developed an interactive course for theorem proving and its applications in computer science (Hoare-Calculi, Program Development by Refinement, verified Code Generators). The resulting „interactive book“ consists of 1200 animated slides ranging from foundations in logics over automated deduction techniques to applications in computer science. The course also includes more than 50 exercises with solutions running on a recent version of a widely used interactive theorem prover.

At the ETH Zürich and the University of Freiburg, I have been involved in various lectures (mostly in English). This includes lectures in the area of programming language semantics, theorem proving, refinement, systematic test in software and hardware as well as software engineering in general. A more detailed list on my teaching activities can be found in the appendix.

My native language is German, and I speak English and French fluently.

# Curriculum Vitae

- 12.11.1965 Birth in Braunschweig, Niedersachsen, Germany.
- 1982 Abitur. (Note 1,8)
- 1982-83 Educational stay in France.
- 1983-90 Studies of computer science at the Technical University Berlin.  
Diplom (*Eine Sharing-Analyse in applikativen Sprachen*. Grade: 1.0)  
Participation in the programming language project OPAL.
- 1991-1997 Phd-student. Work in the BMFT-Projekten KORSO and UniForM in the group of Prof. B. Krieg-Brückner (Universität Bremen).
- 1997 Dissertation: A Generic Calculus of Transformations.  
Supervisor: Bernd Krieg-Brückner, Tobias Nipkow.  
Grade: Magna cum laude.
- Okt. 1997 Research assistant (C1) in the group of Prof. D. Basin at the Albert-Ludwigs-Universität Freiburg
- Sept. 2003 Intl. Conference on Theorem Proving in Higher-Order Logics (TPHOLs)  
Chair: D. Basin, B. Wolff
- Since 2004 Research Assistant (“Oberassistent”) at the ETH Zürich
- July 2005 Habilitation at the Albert-Ludwigs-Universität Freiburg. Venia Legendi for „Informatik“
- Sept. 2006 Intl. Conference on Formal Aspects of Testing and Runtime-Verification (FATES/RV). Chair: B. Wolff
- April 2007 – Sept. 2007: Invited Researcher at Microsoft Research, Redmond, USA.
- Nov. 2007 – Aug. 2008: Senior Researcher at the University of Saarbrücken, Group for Computer Architecture (Lead by Prof. Wolfgang Paul).
- Since Sept. 2007: Full Professor at the LRI at the university Paris/Orsay

## References:

- Prof. Dr. David Basin, [basin@inf.ethz.ch](mailto:basin@inf.ethz.ch), ETH Zürich
- Prof. Dr. Jean-Raymond Abrial [jabrial@inf.ethz.ch](mailto:jabrial@inf.ethz.ch), ETH Zürich
- Prof. Dr. Peter H. Schmitt [pschmitt@ira.uka.de](mailto:pschmitt@ira.uka.de), Universität Karlsruhe
- Prof. Dr. Tobias Nipkow, [nipkow@in.tum.de](mailto:nipkow@in.tum.de), TU München
- Prof. Dr. Ernst-Rüdiger Olderog, [olderog@informatik.uni-oldenburg.de](mailto:olderog@informatik.uni-oldenburg.de), Univ. Oldenburg

## Books

- Klaus Havelund, Manuel Nunez, Grigore Rosu and Burkhart Wolff (eds.):  
Conference Proceedings of the 6.th Intl. *Conference on Testing and Runtime Verification*; Seattle, 15/16. Aug. 2006. LNCS 4262, Springer Verlag, Aug. 2006.
- David Basin and Burkhart Wolff(eds.):  
Conference Proceedings of the 16.th Intl. *Conference on Theorem Proving in Higher-Order Logics (TPHOLs)*; Rome, Sept. 2003. LNCS 2758, Springer Verlag, 2005.
- Burkhart Wolff.  
*A Generic Calculus of Transformations*.  
Dissertation, Universität Bremen. *Biss Monographs*, Shaker Verlag, 1999.

## Additional Scientific Publications

- Burkhart Wolff:  
*Correct Tools for Formal Methods in Software Engineering*. Habilitationsschrift  
Universität Freiburg, 2005. <http://www.inf.ethz.ch/~bwolff/habil/schrift.pdf>
- Achim Brucker, David Basin, J.G. Smaus, Burkhart Wolff:  
*Computer Supported Modelling and Reasoning*.  
Part I: Introduction to Logic and Natural Deduction, Part II: Lambda Calculi and Meta-logical Frameworks, Part III: Proof Procedures in Isabelle, Part IV: Higher-order Logics, its Methodology and its Standard Theories, Part V: Applications in Imperative and Functional Program Verification, Refinement and Test. 1200 animated slides, 54 exercises with solution. <http://www.infsec.ethz.ch/education/permanent>. 2005.

## Publications in Journals

(see <http://www.infsec.ethz.ch/people/wolffb> -> Publications for pdf Versions)

- Achim Brucker et Burkhart Wolff: *An Extensible Encoding of Object-oriented Data Models in HOL with an Application to IMP++*. Accepted by Serge Autexier, Heiko Mantel, Stephan Merz, and Tobias Nipkow (eds): „Selected Papers of the AVOCS-VERIFY Workshop 2006“. 23 pages. To appear in *Formal Aspects of Computing*, 2008.
- David Basin and Hironobu Kuruma and Shin Nakajima and Burkhart Wolff. *The Z Specification Language and the Proof Environment Isabelle/HOL-Z*. In *Computer Software - Journal of the Japanese Society for Software Science and Technology*, 24 (2), pages 21-26, 2007. In Japanese.
- David Basin, Hironobu Kuruma, Kunihiro Miyazaki, Kazuo Takaragi and Burkhart Wolff: *Verifying a Signature Architecture - A Comparative Case Study*. *Formal Aspects of Computing* 19 (1), pages 63-91, Springer.  
See Springer Link <http://dx.doi.org/10.1007/s00165-006-0012-5>.

- Achim Brucker, Jürgen Doser, and Burkhart Wolff: ***Semantic Issues of OCL: Past, Present, and Future***. In Electronic Communications of the EASST, Vol 5, 20 pages, 2007.
- Achim Brucker, Jürgen Doser, and Burkhart Wolff: ***An MDA Framework Supporting OCL***. In Electronic Communications of the EASST, Vol 5, 18 pages, 2007.
- Achim D. Brucker and Burkhart Wolff: ***A Verification-Approach for Applied System Security***. In International Journal of Software Technology and Technology Transfer (STTT), pages 233-247. DOI 10.1007/s10009-004-0176-3, Springer, 2004.
- Achim D. Brucker, Frank Rittinger and Burkhart Wolff: ***HOL-Z 2.0: A Proof Environment for Z-Specifications***. In Journal of Universal Computer Science (JUCS), 9 (2), pages 152-172, 2003.
- Christoph Lüth and Burkhart Wolff: ***Functional Design and Implementation of Graphical User Interfaces for Theorem Provers***. In Journal of Functional Programming (JFP), 9 (2), pages 165-189, 1999.

## Publication in International Conferences

(see <http://www.infsec.ethz.ch/people/wolffb> -> Publications for Details)

### 2008

- Matthias Daum and Jan Dörrenbächer and Mareike Schmidt and Burkhart Wolff: ***A Verification Approach for System-level Concurrent Programs***. In *2nd IFIP Working Conference on Verified Software: Theories, Tools, and Experiments (VSTTE'08)*. To appear in Springer LNCS , 2008.
- Sascha Böhme, Rustan Leino and Burkhart Wolff: ***HOL-Boogie — An Interactive Prover for the Boogie Program-Verifier***. *TPHOLs 2008*, 16 pages. Springer LNCS 5170, 2008.
- Achim Brucker, Lukas Brugger and Burkhart Wolff: ***Model-based Firewall Conformance Testing***. *TestCom/FATES 2008*, 16 pages. Springer LNCS 5047, 2008.
- Achim Brucker and Burkhart Wolff: ***An Extensible Encoding of Object-oriented Data Models in HOL with an Application to IMP++***. *European Conference on Object Oriented Programming (ECOOP 2008)*, 23 pages. Springer LNCS 5142, 2008.
- Achim Brucker and Burkhart Wolff: ***HOL-OCL- A Formal Proof Environment for UML/OCL***. In: *Proceedings of International Conference on Formal Aspects in Software Engineering (FASE 08)*. Springer LNCS 4961, 2008.

### 2007

- Makarius Wenzel and Burkhart Wolff: ***Building Formal Method Tools in the Isabelle/Isar Framework***. In: *Proceedings of International Conference on Theorem Proving in Higher-Order Logics (TPHOLs 2007)*. LNCS 4732, 2007.
- Achim Brucker and Burkhart Wolff: ***Test-Sequence Generation with HOL-TestGen With an Application to Firewall Testing***. In: *Proceedings of International Conference*

on Tests And Proofs (TAP 2007). LNCS 4454. 2007.

## 2006

- Achim Brucker and Jürgen Doser, and Burkhart Wolff: ***A Model Transformation Semantics and Analysis Methodology for SecureUML***. In: Proceedings of *International Conference on Model Driven Engineering Languages and Systems (Models 2006)*. LNCS 4199. Oct. 2006.

## 2005

- David Basin, Hironobu Kuruma, Kazuo Takaragi and Burkhart Wolff: ***Verification of a Signature Architecture with HOL-Z***. In: *Formal Methods (FM 2005)*. LNCS 3582, Springer Verlag, 2005.
- David Aspinall and Christoph Lüth and Burkhart Wolff: ***Assisted Proof Document Authoring***. In: *Mathematical Content Management (MKM 2005)*. LNCS 3863, Springer Verlag, 2005.

## 2004

- Thomas Meyer and Burkhart Wolff: ***Tactic-based Optimized Compilation of Functional Programs***. In: *Conference on Types for Proofs and Programs (TYPES 2004)*. LNCS 3839, pp 202—215, Springer Verlag, 2005.

## 2003

- Achim D. Brucker and Burkhart Wolff. ***Using Theory Morphisms for Implementing Formal Methods Tools***. In: *Conference on Types for Proofs and Programs 2002*. LNCS 2646, Springer, 2005.

## 2002

- Achim D. Brucker and Burkhart Wolff. ***A Proposal for a Formal OCL Semantics in Isabelle/HOL***. In: *Theorem Proving in Higher Order Logics*. LNCS 2410, Springer Verlag, 2002.
- Achim D. Brucker and Burkhart Wolff. ***HOL-OCL: Experiences, Consequences and Design Choices***. In: *UML 2002: Model Engineering, Concepts and Tools*. LNCS 2460, Springer 2002.

## 2001

- Achim D. Brucker and Burkhart Wolff. ***Testing Distributed Component Based Systems Using UML/OCL***. In: *Informatik 2001*. 1 (157), Springer Verlag, 2001.

## 2000

- Christoph Lüth and Burkhart Wolff. ***TAS - A Generic Window Inference System***. In: *TPHOLs 2000*. LNCS 1869, Springer Verlag, 2000.
- Christoph Lüth and Burkhart Wolff.

*More about TAS and IsaWin: Tools for Formal Program Development.*  
In: *FASE 2000*. LNCS 1783, Springer Verlag, 2000.

## 1998

- C. Lüth and E. Karlsen and Kolyang and S. Westmeier and B. Wolff.  
*HOL-Z in the UniForM-Workbench - a Case Study in Tool Integration for Z.*  
In: *11. International Conference of Z Users ZUM'98*. LNCS 1493, Springer Verlag, 1998.

## 1997

- Kolyang and Christoph Lüth and Thomas Meier and Burkhart Wolff.  
*TAS and IsaWin: Generic Interfaces for Transformational Program Development and Theorem Proving.*  
In *TAPSOFT 97*. LNCS 1214, Springer Verlag, 1997.
- Haykal Tej and Burkhart Wolff.  
*A Corrected Failure-Divergence Model for CSP in Isabelle/HOL.*  
In *FME 97 - Industrial Applications and Strengthened Foundations of Formal Methods*. LNCS 1313, Springer Verlag, 1997.

## 1996

- Kolyang and T. Santen and B. Wolff.  
*Correct and User-Friendly Implementation of Transformation Systems.*  
In *FME 96*. LNCS 1125, Springer Verlag, 1996.
- Kolyang and T. Santen and B. Wolff.  
*A Structure Preserving Encoding of Z in Isabelle/HOL.*  
In *Theorem Proving in Higher Order Logics - 9th International Conference*. Springer Verlag, LNCS 1125, Springer Verlag, 1996.

## 1995

- B. Krieg-Brückner and J. Liu and H. Shi and B. Wolff.  
*Towards Correct, Efficient and Reusable Transformational Developments.*  
In *KORSO - Methods, Languages, and Tools for the Construction of Correct Software*. Springer Verlag, LNCS 1009, 1995.

## Publications in International Workshops

(see <http://www.infsec.ethz.ch/people/wolfffb> -> Publications for Details)

## 2008

- **Achim D. Brucker** and **Lukas Brügger** and **Burkhart Wolff**. **Verifying Test-Hypotheses - An Experiment in Test and Proof**. In *Model-based Testing (MBT) 2008*. To appear in *Electronic Notes in Theoretical Computer Science - Elsevier Science Publishers*, 2008.



## 2006

- Achim Brucker, Jürgen Doser, and Burkhart Wolff: ***Semantic Issues of OCL: Past, Present, and Future***. In Proceedings of *OCL for (Meta-)Models in Multiple Application Domains (OCLApps)*, 2006.
- Achim Brucker, Jürgen Doser, and Burkhart Wolff: ***An MDA Framework Supporting OCL***. In Proceedings of *OCL for (Meta-)Models in Multiple Application Domains (OCLApps)*, 2006.
- Achim D. Brucker, Burkhart Wolff: ***A Package for Extensible Object-Oriented Data Models with an Application to IMP++***. In: *International Workshop on Software Verification and Validation (SVV 2006)*. Computing Research Repository (CoRR) 2006.

## 2005

- Achim D. Brucker and Burkhart Wolff: ***Interactive Testing with HOL-TestGen***. In *Formal Approaches to Testing of Software (FATES 2005)*. LNCS 3997, Springer Verlag, 2005.

## 2004

- Achim D. Brucker and Burkhart Wolff. ***Symbolic Test Case Generation for Primitive Recursive Functions***. In *Formal Approaches to Testing of Software (FATES)*. LNCS 3395, Springer-Verlag, 2005.

## 2003

- Achim D. Brucker and Burkhart Wolff: ***A Case Study of a Formalized Security Architecture***. In Proceedings of FMICS03, in *Electronic Notes in Theoretical Computer Science*. Elsevier Science Publishers, 80, 2003.
- Nicole Rauch and Burkhart Wolff: ***Formalizing Java's Two's-Complement Integral Type in Isabelle/HOL***. In Proceedings of FMICS03, in *Electronic Notes in Theoretical Computer Science*. Elsevier Science Publishers, 80, 2003.

## 2001

- Burkhart Wolff. ***Verifying Explicit Substitution Calculi in Binding Structures with Effect Binding***. In *Workshop on Explicit Substitution Theory and Applications (WESTAPP'01)*. Department of Philosophy - Utrecht University, 210, 2001.

## 1995

- Kolyang and B. Wolff. ***Development by Refinement Revisited: Lessons learnt from an Example***. In *Beiträge der GI-Fachtagung "Softwaretechnik 95"*, Braunschweig. GI, 1995.

## Tutorials

- Burkhart Wolff and Achim Brucker: Theorem-prover Based Testing with HOL-TestGen. Tutorial at the TestCom/Fates 2007, Tallinn, Estonia, 26.6.07. See [testcom-fates07.ioc.ee/tutorials.html](http://testcom-fates07.ioc.ee/tutorials.html) and [www.brucker.ch/projects/hol-testgen/testcom-fates-2007](http://www.brucker.ch/projects/hol-testgen/testcom-fates-2007).
- Burkhart Wolff : Theorem-prover Based Testing with HOL-TestGen. Tutorial at the NII, Tokyo, 9.6.08.
- Burkhart Wolff : The HOL-Z Tutorial. Tutorial at the NII, Tokyo, 9.6.08.
- Burkhart Wolff and Achim Brucker: The HOL-OCL Tutorial. Tutorial at the Models 2008 (Planned).

## Invitations to Scientific Talks (last 5 years only)

- June 2008: Hitachi Research, Tokyo, Japan.
- June 2008: National Institute of Informatics, (NII), Tokyo, Japan.
- Jan 2008: Sequence Testing with HOL-TestGen.  
*LRI/Paris 6 (by Prof. Marie-Claude Gaudel), Orsay, France.*
- Jan 2008: Integration of an interactive HOL-Prover into the Boogie Framework.  
*LRI/Paris 6 (by Prof. Christine Paulin), Orsay, France.*
- Sept 2007: Integration of an interactive HOL-Prover into the Boogie Framework.  
Dagstuhl, Verisoft Meeting.
- April-Sept 2007: Invited Researcher at *Microsoft Research, Redmont, USA.*
- September 2006: HOL-OCL: A Proof Environment for Object-Oriented Specification.  
*Microsoft Research, Redmont, USA.*
- February 2005: Symbolic Test Case Generation for Recursive Functions.  
*Microsoft Research, Redmont, USA.*
- December 2004: Symbolic Test Case Generation for Recursive Functions.  
*LRI/Paris 6 (by Prof. Marie-Claude Gaudel), Orsay, France.*

## Research Projects

- SUML-HMS (funded by British-Telecom).  
Test-Case Generation for Object-Oriented Specifications in UML/OCL.  
Role: proponent of the proposal, senior researcher. Budget 360000 CHF. To begin in Sept. 2007.

- EU IP: TrustCom (<http://www.eu-trustcom.com/>).  
Investigating Security in Combining Web-based Services to Virtual Organizations.  
Role: Local Team Leader for the group at the ETH Zürich, senior researcher. Budget: 600000 CHF. 2003 - 2007
- Project: Secure Platform (funded by Hitachi):  
Modeling and Verification of some Properties of a Secure Digital Signature System.  
Role: Senior researcher. Budget 50000 CHF. 2004-2005.
- BMBF. Verbundprojekt: 'MultiMedia-Instruktionen in Sicheren Systemen' (MMISS).  
Investigating new interactive teaching methods.  
Budget(total): 5700000 DM. Freiburg: 418.088 DM. Role: 'Content Provider' (Author of teaching material), and for some time administrator for the site Freiburg. 2001-2004.
- EU-IST Working Group: 'Computer-Assisted Reasoning Based on Type Theory (TYPES)'.  
European research collaboration project on higher-order logic proof environments.  
Budget(total): 370000 EUR. Role: Author, administrator for the site Freiburg. 1999 -2003.
- DFG Projekt: 'Formale Sicherheitsarchitekturen: Sicherheit durch formale Methoden in den Software-Entwurfsphasen.' Budget (total) 480000 DM. Role: proponent of the project proposal, co-supervisor of F. Rittinger (Phd). 2000-2002.
- Interactive Objects GmbH, Freiburg: 'Formal Methods for Distributed Object Systems' (CSFMDOS). Budget: 150000€. Role: Researcher in the projects and co-supervisor of A. Brucker. 2001-2007.

## Teaching at ETH Zürich

- Computer-supported Modelling and Reasoning WS 2006. „Prüfungsberechtigt“.  
(see <http://www.infsec.ethz.ch/education/permanent/csmr>).
- Computer-supported Modelling and Reasoning WS 2004 „Prüfungsberechtigt“.  
(see <http://www.infsec.ethz.ch/education/permanent/csmr>).
- Programmieren in C++ for Physics. (under Heino Gärtner). WS 2005.
- Diskrete Mathematik SS 2004 (under Prof. Ueli Maurer).

All these lectures and assistances have been regularly evaluated by the ETH (result: between good and very good).

## Teaching at Freiburg

- Softwarearchitekturen (WS-00, lecture together with David Basin).
- Programmentwicklung durch Verfeinerung (SS-99; seminar together with Georg Struth).

- Softwaretechnik I (SS-98, SS-99, SS-00, SS-02; lecture together with David Basin).
- Softwaretechnik II (WS 99; lecture together with David Basin, Abdel Ayari, Stefan Friedrich).
- Testen von Soft- und Hardware (WS-98, seminar together with C.Scholl).

The lectures and assistances have been regularly evaluated by the Universität Freiburg (result: between good and very good.).

## **(Co-)Supervision of Phds**

- Lukas Brügger (ETH Zürich, started Sept. 2007)
- Achim Brucker (ETH Zürich, finished Feb. 2007):  
*An Interactive Proof Environment for Object-Oriented Specifications.*
- Thomas Meyer (Universität Bremen, 2005):  
*A Framework for Formal Representation and Transformational Optimization of Executable Specifications.*
- Rimvydas Rukas (Åbo Akademi University, Finland, 2004):  
*Formal Development of Concurrent Components.* (Role: External Referee).
- Haykal Tej (Universität Bremen, 2003):  
*CSP in Isabelle/HOL.*
- Kolyang (Universität Bremen, 1997):  
*An Integrated Formal Support Environment for Z in Isabelle/HOL.*

## Program Committees and Scientific Organizations

- 8th OCL Workshop at the UML/MoDELS Conferences.
- Program Committee Member of '21<sup>th</sup>. Intl. Conference on Theorem Proving in Higher-Order Logics'.(TPHOLs 2008)
- Program Committee Member of International Conference on Testing of Communicating Systems and Formal Approaches to Testing of Software (TestCom-Fates 2008).
- Program Committee Member of Test and Proof (TAP 2008).
- Program Committee Member of the International Workshop Ocl4All, Dresden 2007.
- Program Committee Member of 19th IFIP International Conference on Testing Communication Systems and 7th International Workshop on Formal Approaches to Testing (TestCom-Fates'08)
- Program Committee Member of '20<sup>th</sup>. Intl. Conference on Theorem Proving in Higher-Order Logics'.(TPHOLs 2007)
- PC Member in Workshop OCL for Models in Multiple Application Domains, 2006.
- Conference Chair of FATES/RV 2006, 15/16Aug. 2006, Seattle, USA.
- Program Committee Member of FATES 2005.
- Program Committee Member of SimSafe 2005.
- Program Committee Member of '18<sup>th</sup>. Intl. Conference on Theorem Proving in Higher-Order Logics'.(TPHOLs)
- Program Committee Member of '17<sup>th</sup>. Intl. Conference on Theorem Proving in Higher-Order Logics'.(TPHOLs)
- Program Committee Member of 'User Interfaces for Theorem Provers' (UITP 2005).
- Conference Chair of '16<sup>th</sup>. Intl. Conference on Theorem Proving in Higher-Order Logics' (TPHOLs 2003), Aug. 2003, Rome, Italy.
- Program Committee Member of Workshop 'User Interfaces for Theorem Provers' (UITP 2003).
- Member of the steering committee of the GI-Fachgruppe 'Formale Methoden und Software Engineering für Sichere Systeme'.
- <http://www.infsec.ethz.ch/people/wolffb>

## Additional Refereeing in Conferences and Journals

- International Workshop on Formal Methods in Education and teaching (FMET 08)
- International Conference on Functional Programming (ICFP 2008)
- International Joint Conference on Automated Reasoning (IJCAR 2008)
- 8th OCL Workshop at the UML/MoDELS Conferences
- Journal STVR 2008
- Conference of Automated Deduction (CADE 2007).
- Formal Methods (FM 2005).
- 12th International Conference on Logic for Programming Artificial Intelligence and Reasoning (LPAR 05).
- Foundations of Software Science and Computation Structures (FOSSACS 05).
- 2nd IEEE International Conference on Software Engineering and Formal Methods (SEFM 04).
- Third International Conference on Quality Software (QSIC 2003).
- Frontieres in Combining Systems (FroCoS 1998, 2000).
- Theorem Proving in Higher-Order Logics (TPHOLs, since 1998).
- Formal Methods Europe (FME 2000, 2002, 2005).

## System Descriptions and Documentation

- Achim Brucker and Burkhart Wolff: The *HOL-OCL Home Page*. <http://www.brucker.ch/projects/hol-ocl/index.de.html>. See also:
- Achim D. Brucker and Burkhart Wolff: *The HOL-OCL Book*. (<http://www.brucker.ch/bibliography/download/2001/info2001.pdf>). ETH Zürich, Technical Report 525, 2006.
- Achim Brucker and Burkhart Wolff: The *HOL-TestGen Home Page*. <http://www.brucker.ch/projects/testgen>. See also:
- Achim Brucker and Burkhart Wolff: *HOL-TestGen 1.0.0 User Guide*. ETH Zürich, Technical Report 482, 2005. Sources available from <http://www.brucker.ch/projects/hol-testgen/index.de.html>.

- Achim Brucker, Frank Rittinger and Burkhart Wolff:  
***The HOL-Z homepage.***  
Sources available from <http://www.brucker.ch/projects/hol-z>.
- Haykal Tej and Burkhart Wolff:  
***The HOL-CSP homepage.***  
Sources available from [http://www.informatik.uni-freiburg.de/~wolff/doc/isa\\_doc/CSP](http://www.informatik.uni-freiburg.de/~wolff/doc/isa_doc/CSP).
- Christoph Lüth and Burkhart Wolff:  
***The TAS and IsaWin-Homepage.***  
Sources available from <http://www.informatik.uni-bremen.de/~cxl/tas>.
- Christoph Lüth and Burkhart Wolff:  
***sml\_tk: Functional Programming for GUIs - Reference Manual.***  
Albert-Ludwigs-Universität Freiburg, Technical Report 158, 2001.