

Andreas Podelski

- 2006- University of Freiburg, Chair for Software Engineering.
Ecole Normale Supérieure, Paris, Invited Professor, Oct 2010.
Stanford Research Institute (SRI), Research Fellow, Feb-Aug 2009.
- 1994-2006 Max-Planck-Institut für Informatik, Research Group Leader.
Professor at the University of Saarbrücken
Microsoft Research, Redmond WA, Visiting Researcher, Sep 2000 - Mar 2001.
Ecole Normale Supérieure, Paris, Invited Professor, May 2000.
- 1992-94 DIGITAL Paris Research Laboratory, Member of Research Staff.
Habilitation at Université Paris 7.
- 1989-92 LITP – Université Paris 7, Maître de Conférences.
- 1988-89 University of California at Berkeley, PostDoc.
- 1986-89 Université Paris 7, Doktoral Student.
Diplôme de Doctorat in February 1989.
MCC, Austin TX, Research Intern (Jul-Sep 87).
- 1985-86 Brown University, Providence RI, Visiting PhD Student.
- 1979-85 Universität von Münster, Student in Mathematik, Logik und Informatik.
Diplom in June 1985.

Professionelle Aktivitäten

Projekteinwerbung

- BMWK. Salomo - Automatische Überprüfbarkeit von Anforderungen als Bestandteil von Softwareerstellungs-Verträgen. www.salomo-projekt.de. Dreijähriges Verbundprojekt mit den Rechtswissenschaften der Universität Mannheim, Start April 2009. Fördersumme: 900.000,00. Sprecher.
- ZIM. Entwicklung eines verifizierten Funkprotokolls für sichere Sensornetzwerke. Zweijähriges FuE-Kooperationsprojekt, Start Januar 2010. Fördersumme: 173.315,00. Projektleiter.
- ZIM. Entwicklung einer sicheren Benutzerschnittstelle für sicherheitskritische Systeme. Zweijähriges FuE-Kooperationsprojekt, Start Juli 2010. Fördersumme: 174.178,00. Projektleiter.
- DFG. AVACS - Automated Analysis and Verification of Complex Systems. Transregio-SFB, 2. Phase, Start Januar 2008. Fördersumme 614,005,32. Projektbereichsleiter.
- DFG. AVACS - Automated Analysis and Verification of Complex Systems. Transregio-SFB, 1. Phase, Start Januar 2004. Fördersumme 605.571,06 . Projektbereichsleiter.
- Microsoft. Shapes - Consistency Analysis for Data Structures. Research Grant. Fördersumme: 90.000. Projektleiter.
- BMBF. Verisoft XT - Beweisen als Ingenieurwissenschaft. Dreijähriges Verbundprojekt, Start Juli 2007. Fördersumme: 717.028,00. Projektbereichsleiter.
- BMBF. Verisoft - Beweisen als Ingenieurwissenschaft. Vierjähriges Verbundprojekt, Start Juli 2003. Fördersumme: 941.150,00. Projektbereichsleiter.
- EU. R4eGov - Towards e-Administration in the large. Dreijähriges FP6-IST-Projekt (Information Society Technologies). Start März 2006. Fördersumme: 320.000,00. Principal Investigator.
- EU. eJustice - Towards a global security and visibility framework for Justice in Europe. Zweijähriges IST-Projekt (Information Society Technologies). Start März 2004. Fördersumme: 220.000,00. Principal Investigator.

Doktoranden

Daniel Dietsch. Algorithmic Construction of Requirement Specifications. Start June 2010.

Sergio Feo Arenis. Inference of Data Structure Invariants. Start June 2010.

Sergiy Bogomolov. Analysis of Requirements for Hybrid Systems. Start September 2009.

Matthias Heizmann. Program Verification based on Interpolant Automata. Start September 2009.

Marco Muniz. Exploiting Sequentiality for the Analysis of Real-time Sensor Networks. Start September 2009.

Jürgen Christ. Decision Procedures and Interpolants for Program Verification. Start September 2009.

Stephan Arlt. Korrekte Schnittstellen für sicherheitskritische Systeme. Start April 2009.

Amalinda Oertel. Effective Correctness Criteria for Real-time Requirements. Start October 2008.

Martin Mehlmann. Local temporal reasoning for concurrent systems. Start September 2007.

Corina Mitrohin. Compositional Stability Analysis for Hybrid Systems. Start July 2007.

Bruno Berstel. An Axiomatic Approach to the Verification of Business Rule Programs. Start January 2006.

Martin Schäf. Static Program Analysis for Provably Inevitable Errors. Submitted.

Martin Wehrle. Transition-based Directed Model Checking. Submitted.

Stefan Maus. Verification of Hypervisor Subroutines written in Assembler. Submitted.

Nassim Seghir. Abstraction Refinement Techniques for Software Model Checking. December 15, 2010.

Alexander Malkis. Cartesian Abstraction and Verification of Multithreaded Programs. February 2010.

Thomas Wies. Symbolic Shape Analysis. November 2009.

Silke Wagner. Stability Proofs for Hybrid Systems. Oktober 2008.

Andrey Rybalchenko. Temporal Verification with Transition Invariants. June 2005.

Werner Backes. Programmanalyse des XRTL Zwischencodes. January 2005.

Patrick Maier. A Lattice-Theoretic Framework For Circular Assume-Guarantee Reasoning. July 2003.

Pratik Mukhopadhyay. A Uniform Constraint-based Framework for the Verification of Infinite State Systems. June 2001.

Member of Editorial Board

TOPLAS. ACM Transactions of Programming Languages and Systems.

JAR. Journal of Automated Reasoning.

CPL. Constraint Programming Letters. Area Editor for Verification.

STTT. Journal on Software Tools for Technology Transfer.

Member of Steering Committee

VMCAI. Conference on Verification, Model Checking and Abstract Interpretation.

PPDP. Principles and Practice of Declarative Programming.

ETAPS. European Joint Conferences on Theory and Practice of Software (1998-2005).

Invited Speaker bei Internationalen Konferenzen

ETAPS 2011. European Joint Conference on Theory and Practice of Software, March 26 - April 3, 2011, Saarbrücken, Germany. Preliminary title: Automata-based Program Verification.

SAS 2010. Symposium on Static Analysis, Perpignan, France, September 13-17, 2010. Title: Size-change Termination and Transition Invariants.

VSTTE 2008. Conference on Verified Software: Theories, Tools and Experiments. October 6-9, 2008. Toronto, Ontario, Canada. Title: Verification as Abstract Least-Fixpoint Checking.

COSMICA 2005. Workshop on Verification of Concurrent Systems with Dynamic Allocated Heaps. July 10, 2005, Lisboa, Portugal. Title: Shape Analysis with Boolean Heaps.

CP 2004. Conference on Principles and Practice of Constraint Programming, September 27 - October 1, 2004, Toronto, Ontario, Canada. Title: Constraints in Program Analysis and Verification.

CDB 2004. Symposium on Applications of Constraint Databases, June 12-13, Paris, France. Title: Constraint-Based Model Checking of ECA Rules.

AVIS'03. Workshop on Automated Verification of Infinite-State Systems. Warsaw, Poland, April 2003. Title: Program Analysis for Termination.

VMCAI 2003. Conference on Verification, Model Checking and Abstract Interpretation. NYU, New York, Januar 2003. Title: Software Model Checking with Abstraction Refinement.

FMICS 2002. Workshop on Formal Methods for Industrial Critical Systems. University of Malaga, Spanien, Juli 2002. Title: Abstraction for Software Model Checking.

CFV 2002. Workshop on Constraints in Formal Verification. Cornell University, Ithaca, New York, USA, September 2002. Title: Constraint-based Verification.

- SAS 2000. Symposium on Static Analysis. Santa Barbara, Juni-Juli 2000. Title: Model Checking as Constraint Solving.
- CL 2000. Conference on Computational Logic. London, Juli 2000. Title: Constraints in Program Analysis and Model Checking.
- CADE 2000. Conference on Automated Deduction. Pittsburgh, PA, Juni 2000. Title: Constraints in Program Analysis and Model Checking.
- CP 1997. Conference on Principles and Practice of Constraint Programming, Linz, Österreich, Oktober-November 1997. Title: Set Constraints - a Pearl in Research on Constraints. Invited Tutorial.

PC Member oder PC Chair von Internationalen Konferenzen

- PLDI 2011. ACM SIGPLAN Conference on Programming Language Design and Implementation. Austin, Texas, June 4-11, 2011.
- FMICS 2010. Workshop on Formal Methods for Industrial Critical Systems, Antwerp, Belgium, September 20-21, 2010.
- SSS 2010. Symposium on Stabilization, Safety, and Security of Distributed Systems, September 20-22, 2010, New York, New York.
- ESOP 2010. European Symposium on Programming, March 22-26, 2010, Paphos, Cyprus.
- HVC 2009. Haifa Verification Conference. Haifa, Israel, October 19-22, 2009.
- FCT 2009. Symposium on Fundamentals of Computation Theory, September 2-4, 2009, Wroclaw, Poland.
- TACAS 2009. Conference on Tools And Algorithms for the Construction And Analysis Of Systems, March 22-29, 2009, York, UK.
- SAS 2009. Static Analysis Symposium, September 13-18, 2009, Oxford, UK.
- SOFSEM 2009. Conference on Current Trends in Theory and Practice of Computer Science, January 24-30, 2009, Spindleruv Mlyn, Czech Republic.
- LPAR 2008. Conference on Logic for Programming, Artificial intelligence, and Reasoning, November 22-27, 2008, Doha, Qatar.
- VSTTE 2008. Conference on Verified Software: Therories, Tools and Experiments, October 6-9, 2008, Toronto, Canada CAV 2008.
- CAV 2008. Conference on Computer Aided Verification, July 7-14, 2008, Princeton, USA.
- VMCAI 2008. Conference on Verification, Model Checking and Abstract Interpretation, January 7-9, 2008, San Francisco, USA.

- SEFM 2007. Conference on Software Engineering and Formal Methods, September 10-14, 2007, London, UK.
- SAS 2007. Static Analysis Symposium, August 22-24, 2007, Lyngby, Denmark.
- PPDP 2007. Symposium on Principles and Practice of Declarative Programming, July 14-16, 2007, Wroclaw, Poland (PC Chair).
- FMICS 2007. Workshop on Formal Methods for Industrial Critical Systems, July 1-2, 2007, Berlin, Germany.
- TACAS 2007. Conference on Tools And Algorithms for the Construction And Analysis Of Systems, March 24 - April 1, 2007, Braga, Portugal.
- VMCAI 2007. Conference on Verification, Model Checking and Abstract Interpretation, January 14-16, 2007, Nice, France (PC Chair).
- ASIAN 2006. Annual Asian Computing Science Conference, December 6-8, 2006, Tokyo, Japan.
- SAS 2006. Static Analysis Symposium, August 29-31, 2006, Seoul, Korea.
- POPL 2006. ACM Symposium on Principles of Programming Languages, January 11-13, 2006, Charleston, South Carolina.
- VMCAI 2006. Conference on Verification, Model Checking and Abstract Interpretation, January 8-10, 2006, Charleston, South Carolina.
- LAA 2006. Logic and Algorithms, Workshop on Constraints and Verification, 8 - 12 May 2006, Cambridge, UK (Organizer together with Moshe Vardi).
- SAS 2005. Static Analysis Symposium, London, September 2005.
- SEFM 2005. IEEE Conference on Software Engineering and Formal Methods, September 7-9, 2005, Koblenz, Germany.
- LOPSTR 2005. Logic-based Program Synthesis and Transformation, September 2005, London.
- CADE 2005. Conference on Automated Deduction, Tallinn, Estonia, July 22-27, 2005.
- TACAS 2005. Tools and Algorithms for the Construction and Analysis of Systems. Edinburgh, Scotland, 2-10 April 2005.
- VMCAI 2005. Conference on Verification, Model Checking and Abstract Interpretation, Paris, January 2005.
- ICLP 2004. Conference on Logic Programming, San Malo, France, September 6-9, 2004.
- SAS 2004. Static Analysis Symposium, Verona, Italy, August 2004.
- LOPSTR 2004. Symposium on Logic-based Program Synthesis and Transformation, Verona, Italy, August 2004.
- TACAS 2004. Conference on Tools and Algorithms for the Construction and Analysis of Systems, Barcelona, Spain, April 2004. (PC Chair)

- SPIN 2003. SPIN Conference on Model Checking of Software, Portland, Oregon, Mai 2003.
- LICS 2002. IEEE Symposium on Logic in Computer Science, Kopenhagen, Denmark, July–August 2002.
- PADL 2002. Practical Aspects of Declarative Languages, Portland, Oregon, Januar 2002.
- PLDI 2001. ACM SIGPLAN Conference on Programming Language Design and Implementation. Snowbird, Utah, Juni 2001.
- ICLP 2001. International Conference on Logic Programming. Paphos, Zypern, November 2001.
- PPDP 2001. ACM Conference on Principles and Practice of Declarative Programming. Florenz, Italien, September 2001.
- TACAS 2001. Conference on Tools and Algorithms for the Construction and Analysis of Systems. Genua, Italien, April 2001.
- IJCAR 2001. International Joint Conference on Automated Reasoning. Siena, Italien, Juni 2001.
- ICALP 2001. International Conference on Automata, Languages and Programming. Heraklion, Griechenland, Juli 2001.
- CL2000. Computational Logic Conference 2000. London, GB, Juli 2000.
- ESOP 2000. European Symposium on Programming. Berlin, April 2000.
- SAS 1999. Symposium on Static Analysis. Venedig, Italien. September 1999.
- FoSSaCS 1998. Foundations of Software Science and Computation Structures. Lissabon, Portugal. March-April 1998.
- CP 1997. Conference on Principles and Practice of Constraint Programming. Schloss Hagenberg, Austria, Oktober 1997.
- ILPS 1997. Fourteenth International Logic Programming Symposium. Long Island, New York, Oktober 1997.

Publikationen

Konferenzen

- ATVA. Sergiy Bogomolov, Corina Mitrohin, Andreas Podelski: Composing Reachability Analyses of Hybrid Systems for Safety and Stability. *Automated Technology for Verification and Analysis* 2010: 67-81
- POPL. Andreas Podelski, Thomas Wies: Counterexample-guided focus. *Principles of Programming Languages* 2010: 249-260
- POPL. Matthias Heizmann, Jochen Hoenicke, Andreas Podelski: Nested interpolants. *Principles of Programming Languages* 2010: 471-482
- SAS. Matthias Heizmann, Neil D. Jones, Andreas Podelski: Size-Change Termination and Transition Invariants. *Static Analysis Symposium* 2010: 22-50
- SAS. Alexander Malkis, Andreas Podelski, Andrey Rybalchenko: Thread-Modular Counterexample-Guided Abstraction Refinement. *Static Analysis Symposium* 2010: 356-372
- TACAS. Jochen Hoenicke, Ernst-Rüdiger Olderog, Andreas Podelski: Fairness for Dynamic Control. *Tools and Algorithms for the Construction and Analysis of Systems* 2010: 251-265
2009
- FM. Jochen Hoenicke, K. Rustan M. Leino, Andreas Podelski, Martin Schäfer, Thomas Wies: It's Doomed; We Can Prove It. *Formal Methods* 2009: 338-353
- SAS. Mohamed Nassim Seghir, Andreas Podelski, Thomas Wies: Abstraction Refinement for Quantified Array Assertions. *Static Analysis Symposium* 2009: 3-18
- SAS. Matthias Heizmann, Jochen Hoenicke, Andreas Podelski: Refinement of Trace Abstraction. *Static Analysis Symposium* 2009: 69-85
- TACAS. Martin Wehrle, Sebastian Kupferschmid, Andreas Podelski: Transition-Based Directed Model Checking. *Tools and Algorithms for the Construction and Analysis of Systems* 2009: 186-200
- CAV. Andreas Podelski, Andrey Rybalchenko, Thomas Wies: Heap Assumptions on Demand. *Computer-Aided Verification* 2008: 314-327
- CAV. Sebastian Kupferschmid, Martin Wehrle, Bernhard Nebel, Andreas Podelski: Faster Than Uppaal? *Computer-Aided Verification* 2008: 552-555
- ICAPS. Martin Wehrle, Sebastian Kupferschmid, Andreas Podelski: Useless Actions Are Useful. *International Conference on Automated Planning and Scheduling* 2008: 388-395
- VMCAI. Rayna Dimitrova, Andreas Podelski: Is Lazy Abstraction a Decision Procedure for Broadcast Protocols? *Verification, Model Checking, and Abstract Interpretation* 2008: 98-111

- VSTTE. Andreas Podelski: Verification, Least-Fixpoint Checking, Abstraction. *Verified Software: Theories, Tools, Experiments 2008*: 3 2007
- FORMATS. Andreas Podelski, Silke Wagner: Region Stability Proofs for Hybrid Systems. *Formal Modeling and Analysis of Timed Systems 2007*: 320-335
- HSCC. Andreas Podelski, Silke Wagner: A Sound and Complete Proof Rule for Region Stability of Hybrid Systems. *Hybrid Systems: Computation and Control 2007*: 750-753
- PADL. Andreas Podelski, Andrey Rybalchenko: ARMC: The Logical Choice for Software Model Checking with Abstraction Refinement. *Practical Aspects of Declarative Languages 2007*: 245-259
- PLDI. Byron Cook, Andreas Podelski, Andrey Rybalchenko: Proving thread termination. *Programming Language Design and Implementation 2007*: 320-330
- POPL. Byron Cook, Alexey Gotsman, Andreas Podelski, Andrey Rybalchenko, Moshe Vardi: Proving that programs eventually do something good. *Principles of Programming Languages 2007*: 265-276
- SAS. Alexander Malkis, Andreas Podelski, Andrey Rybalchenko: Precise Thread-Modular Verification. *Static Analysis Symposium 2007*: 218-232
- SPIN. Mohamed Nassim Seghir, Andreas Podelski: ACSAR: Software Model Checking with Transfinite Refinement. *SPIN Workshop on Model Checking of Software 2007*: 274-278
- TACAS. Sebastian Kupferschmid, Klaus Dräger, Jörg Hoffmann, Bernd Finkbeiner, Henning Dierks, Andreas Podelski, Gerd Behrmann: Uppaal/DMC- Abstraction-Based Heuristics for Directed Model Checking. *Tools and Algorithms for the Construction and Analysis of Systems 2007*: 679-682
- CAV. Byron Cook, Andreas Podelski, Andrey Rybalchenko: Terminator: Beyond Safety. *Computer-Aided Verification 2006*: 415-418
- HSCC. Andreas Podelski, Silke Wagner: Model Checking of Hybrid Systems: From Reachability Towards Stability. *Hybrid Systems: Computation and Control 2006*: 507-521
- ICTAC. Alexander Malkis, Andreas Podelski, Andrey Rybalchenko: Thread-Modular Verification Is Cartesian Abstract Interpretation. *International Colloquium on Theoretical Aspects of Computing 2006*: 183-197
- PLDI. Byron Cook, Andreas Podelski, Andrey Rybalchenko: Termination proofs for systems code. *Programming Language Design and Implementation 2006*: 415-426
- SPIN. Klaus Dräger, Bernd Finkbeiner, Andreas Podelski: Directed Model Checking with Distance-Preserving Abstractions. *SPIN Workshop on Model Checking of Software 2006*: 19-34
- VMCAI. Thomas Wies, Viktor Kuncak, Patrick Lam, Andreas Podelski, Martin Rinard: Field Constraint Analysis. *Verification, Model Checking, and Abstract Interpretation 2006*: 157-173

- ESOP. Andreas Podelski, Ina Schaefer, Silke Wagner: Summaries for While Programs with Recursion. European Symposium of Programming 2005: 94-107
- POPL. Andreas Podelski, Andrey Rybalchenko: Transition predicate abstraction and fair termination. Principles of Programming Languages 2005: 132-144
- SAS. Andreas Podelski, Thomas Wies: Boolean Heaps. Static Analysis Symposium 2005: 268-283
- SAS. Byron Cook, Andreas Podelski, Andrey Rybalchenko: Abstraction Refinement for Termination. Static Analysis Symposium 2005: 87-101
- TACAS. Amir Pnueli, Andreas Podelski, Andrey Rybalchenko: Separating Fairness and Well-Foundedness for the Analysis of Fair Discrete Systems. Tools and Algorithms for the Construction and Analysis of Systems 2005: 124-139
- CP. Andreas Podelski: Constraints in Program Analysis and Verification. Constraint Programming 2004: 1-4
- LICS. Andreas Podelski, Andrey Rybalchenko: Transition Invariants. Logic in Computer Science 2004: 32-41
- VMCAI. Andreas Podelski, Andrey Rybalchenko: A Complete Method for the Synthesis of Linear Ranking Functions. Verification, Model Checking, and Abstract Interpretation 2004: 239-251
- FoSSaCS. Bruno Blanchet, Andreas Podelski: Verification of Cryptographic Protocols: Tagging Enforces Termination. Foundations of Software Science and Computational Structures 2003: 136-152
- VMCAI. Andreas Podelski: Software Model Checking with Abstraction Refinement. Verification, Model Checking, and Abstract Interpretation 2003: 1-3
- ICLP. Witold Charatonik, Supratik Mukhopadhyay, Andreas Podelski: Constraint-Based Infinite Model Checking and Tabulation for Stratified CLP. International Conference on Logic Programming 2002: 115-129
- SARA. Supratik Mukhopadhyay, Andreas Podelski: An Algebraic Framework for Abstract Model Checking. Symposium on Abstraction, Reformulation and Approximation 2002: 152-169
- TACAS. Thomas Ball, Andreas Podelski, Sriram Rajamani: Relative Completeness of Abstraction Refinement for Software Model Checking. Tools and Algorithms for the Construction and Analysis of Systems 2002: 158-172
- VMCAI. Witold Charatonik, Supratik Mukhopadhyay, Andreas Podelski: Compositional Termination Analysis of Symbolic Forward Analysis. Verification, Model Checking, and Abstract Interpretation 2002: 109-125
- PSI. Supratik Mukhopadhyay, Andreas Podelski: Accurate Widenings and Boundedness Properties of Timed Systems. Ershov Memorial Conference 2001: 79-94

- TACAS. Thomas Ball, Andreas Podelski, Sriram Rajamani: Boolean and Cartesian Abstraction for Model Checking C Programs. *Tools and Algorithms for the Construction and Analysis of Systems* 2001: 268-283
- PADL. Supratik Mukhopadhyay, Andreas Podelski: Constraint Database Models Characterizing Timed Bisimilarity. *Practical Aspects of Declarative Languages* 2001: 245-258
- SAS. Andreas Podelski: Model Checking as Constraint Solving. *Static Analysis Symposium* 2000: 22-37
- CL. Supratik Mukhopadhyay, Andreas Podelski: Model Checking for Timed Logic Processes. *Computational Logic*. CL 2000: 598-612
- POPL. Javier Esparza, Andreas Podelski: Efficient Algorithms for pre* and post* on Interprocedural Parallel Flow Graphs. *Principles of Programming Languages* 2000: 1-11
- POPL. Witold Charatonik, Andreas Podelski, Jean-Marc Talbot: Paths vs. Trees in Set-Based Program Analysis. *Principles of Programming Languages* 2000: 330-337
- TACAS. Giorgio Delzanno, Andreas Podelski: Model Checking in CLP. *Tools and Algorithms for the Construction and Analysis of Systems* 1999: 223-239
ETAPS Best Paper Award.
- FSTTCS. Supratik Mukhopadhyay, Andreas Podelski: Beyond Region Graphs: Symbolic Forward Analysis of Timed Automata. *Foundations of Software Technology and Theoretical Computer Science* 1999: 232-244
- CSL. Giorgio Delzanno, Javier Esparza, Andreas Podelski: Constraint-Based Analysis of Broadcast Protocols. *Computer Science Logic* 1999: 50-66
- ESOP. Andreas Podelski, Witold Charatonik, Martin Mller: Set-Based Failure Analysis for Logic Programs and Concurrent Constraint Programs. *European Symposium of Programming* 1999: 177-192
- SAS. Witold Charatonik, Andreas Podelski: Directional Type Inference for Logic Programs. *Static Analysis Symposium* 1998: 278-294
- LICS. Witold Charatonik, David McAllester, Damian Niwinski, Andreas Podelski, Igor Walukiewicz: The Horn Mu-calculus. *Logic in Computer Science* 1998: 58-69
- TACAS. Witold Charatonik, Andreas Podelski: Set-Based Analysis of Reactive Infinite-State Systems. *Tools and Algorithms for the Construction and Analysis of Systems* 1998: 358-375
- RTA. Witold Charatonik, Andreas Podelski: Co-definite Set Constraints. *Rewriting Techniques and Applications* 1998: 211-225
- CSL. Abdelwaheb Ayari, David Basin, Andreas Podelski: LISA: A Specification Language Based on WS2S. *Computer Science Logic* 1997: 18-34
- CP. Leszek Pacholski, Andreas Podelski: Set Constraints: A Pearl in Research on Constraints. *Constraint Programming* 1997: 549-562

- LICS. Witold Charatonik, Andreas Podelski: Set Constraints with Intersection. *Logic in Computer Science* 1997: 362-372
- CP. Martin Mller, Joachim Niehren, Andreas Podelski: Ordering Constraints over Feature Trees. *Constraint Programming* 1997: 297-311
- TAPSOFT. Martin Mller, Joachim Niehren, Andreas Podelski: Inclusion Constraints over Non-empty Sets of Trees. *TAPSOFT* 1997: 345-356
- CP. Witold Charatonik, Andreas Podelski: The Independence Property of a Class of Set Constraints. *Constraint Programming* 1996: 76-90
- CP. Andreas Podelski, Gert Smolka: Situated Simplification. *Constraint Programming* 1995: 328-344
- ICLP. Andreas Podelski, Gert Smolka: Operational Semantics of Constraint Logic Programs with Coroutining. *International Conference on Logic Programming* 1995: 449-463
- ILPS. Andreas Podelski, Peter Van Roy: The Beauty and the Beast Algorithm: Quasi-Linear Incremental Tests of Entailment and Disentailment over Trees. *ILPS* 1994: 359-374
- ILPS. Hassan At-Kaci, Andreas Podelski, Seth Copen Goldstein: Order-Sorted Feature Theory Unification. *ILPS* 1993: 506-524
- MFCS. Danièle Beauquier, Andreas Podelski: Rabin Tree Automata and Finite Monoids. *Mathematical Foundations of Computer Science* 1993: 262-271
- ICALP. Pierre Péladéau, Andreas Podelski: On Reverse and General Definite Tree Languages. *International Colloquium on Automata, Languages and Programming* 1992: 150-161
- LPAR. Hassan Ait-Kaci, Andreas Podelski: Entailment and Disentailment of Order-Sorted Feature Constraints. *Logic for Programming, Artificial intelligence, and Reasoning* 1993: 1-18
- RTA. Joachim Niehren, Andreas Podelski, Ralf Treinen: Equational and Membership Constraints for Finite Trees. *Rewriting Techniques and Applications* 1993: 106-120
- TAPSOFT. Joachim Niehren, Andreas Podelski: Feature Automata and Recognizable Sets of Feature Trees. *Theory and Practice of Software Development*, 1993: 356-375
- MFPS. Hugues Calbrix, Maurice Nivat, Andreas Podelski: Ultimately Periodic Words of Rational w-Languages. *Mathematical Foundations of Programming Semantics* 1993: 554-566
- FGCS. Hassan At-Kaci, Andreas Podelski, Gert Smolka: A Feature-Based Constraint System for Logic Programming with Entailment. *Fifth Generation Computing Systems* 1992: 1012-1021
- WELP. Hassan At-Kaci, Andreas Podelski: Logic Programming with Functions over Order-Sorted Feature Terms. *Workshop on Extensions of Logic Programming* 1992: 100-119

Journale

- CACM. Byron Cook, Andreas Podelski, Andrey Rybalchenko. Proving program termination. Communications of the ACM. (Accepted on June 24, 2010)
- FMSD. Byron Cook, Andreas Podelski, Andrey Rybalchenko. Summarization for termination: no return. Formal Methods in System Design 35(3): 369-387 (2009)
- STTT. Klaus Dräger, Bernd Finkbeiner, Andreas Podelski. Directed model checking with distance-preserving abstractions. Journal on Software Tools for Technology 11(1) 27-37 (2009)
- TOPLAS. Andreas Podelski, Andrey Rybalchenko. Transition predicate abstraction and fair termination. ACM Transactions on Programming Languages and Systems 29(3):1-33 (2007)
- TCS. Bruno Blanchet, Andreas Podelski. Verification of cryptographic protocols: tagging enforces termination. Theoretical Computer Science 333(1-2): 67-90 (2005)
- STTT. Tom Ball, Andreas Podelski, Sriram Rajamani. Boolean and Cartesian Abstraction for Model Checking C Programs. Journal on Software Tools for Technology Transfer 5(1): 49-58 (2003)
- STTT. Giorgio Delzanno, Andreas Podelski. Constraint-Based Deductive Model Checking. Journal on Software Tools for Technology Transfer 3(3):250-270 (2001)
- IC. Witold Charatonik, Andreas Podelski. Set Constraints with Intersection. Information and Computation 179(2): 213-229 (2002)
- CONSTRAINTS. Martin Müller, Joachim Niehren, Andreas Podelski. Ordering Constraints over Feature Trees 5(1-2):7-41 (2000)
- JLP. Hassan Aït-Kaci, Andreas Podelski, Seth Goldstein. OSF-Theory Unification. Journal of Logic Programming 30(2):99-124 (1997)
- TCS. Andreas Podelski, Gert Smolka. Situated Simplification. Theoretical Computer Science 173:209-233 (1997)
- TOPLAS. Hassan Aït-Kaci, Andreas Podelski. Functions as passive constraints in LIFE. ACM Transactions on Programming Languages and Systems 16 (3):1-40 (1994)
- TCS. Hassan Aït-Kaci, Andreas Podelski, Gert Smolka. A Feature Constraint System for Logic Programming with Entailment. Theoretical Computer Science 122:263-283 (1994)
- TCS. Danièle Beauquier, Andreas Podelski. Rabin Tree Automata and Finite Monoids. Theoretical Computer Science 134:13-25 (1994)
- JLP. Hassan Aït-Kaci, Andreas Podelski. Towards a Meaning of LIFE. Journal of Logic Programming 16:195-234 (1993)
- SICOMP. Maurice Nivat, Andreas Podelski. Minimal Ascending and Descending Tree Automata. SIAM Journal of Computing 26(1):39-58 (1997)

- DM. Maurice Nivat, Andreas Podelski. Another Variation on the Common Subexpression Problem. *Discrete Mathematics* 114:379–401 (1993)
- MST. Bruno Courcelle and Damian Niwiński, Andreas Podelski. A Geometrical View of Determinization and Minimization of Finite Automata. *Mathematical Systems Theory* 24:117–146 (1991).

Buchkapitel

Ernst-Rüdiger Olderog, Andreas Podelski. Explicit Fair Scheduling for Dynamic Control. In: *Concurrency, Compositionality, and Correctness*. 2010: 96-117

Bernd Becker, Andreas Podelski, Werner Damm, Martin Fränzle, Ernst-Rüdiger Olderog, Reinhard Wilhelm: SFB/TR 14 AVACS - Automatic Verification and Analysis of Complex Systems (Der Sonderforschungsbereich/Transregio 14 AVACS - Automatische Verifikation und Analyse komplexer Systeme). *IT - Information Technology* 49(2): 118-128 (2007)

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