

## Christoph Weidenbach

Prof. Dr., born September 13, 1965, German, Male  
Max-Planck-Institut für Informatik  
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Independent Research Group Leader



### University training and degree

1989 Diploma in Computer Science, Universität Kaiserslautern, Germany  
1984-1989 Student of Computer Science, Universität Kaiserslautern, Germany

### Advanced academic qualifications

2007 Adjunct Professor (Honorarprofessor), Universität des Saarlandes, Germany  
2000 Habilitation in Computer Science, Universität des Saarlandes, Germany  
1996 Doctorate in Computer Science (Dr.-rer.nat.), Universität des Saarlandes, Germany  
Advisor: Prof. Dr. Harald Ganzinger

### Postgraduate professional career

since 2005 Independent Research Group Leader, MPI-INF, Saarbrücken, Germany  
1999–2005 IT Manager GM Powertrain Europe  
1991–1999 Researcher, MPI-INF, Saarbrücken, Germany  
1989–1991 Researcher, Universität Kaiserslautern, Germany

### Other

#### Selected Scientific Activities

President of CADE (2016–), IJCAR Steering Committee (2014-2015, 2016–), CADE Trustee (2009-2015, 2016–), Steering Committee of the German Computer Science Competitions (BWINF) (2012–), Scientific Leader of the INRIA project VeriDis (2012–), Admission Committee of the Saarbrücken Graduate School in Computer Science (2009–).

IJCAR Chair (2014), Editor Journal of Automated Reasoning (2012–), Numerous program committee memberships, with the most important ones being CADE, FRODOS, IJCAI, IJCAR, LPAR.

#### Scientific Achievements & Recognition

2017 Thoralf Skolem Award, CADE  
2017 Selected Paper Award CADE-26  
2016 IJCAR best paper award  
2005 Chairmans Recognition Award, GM Powertrain, Europe  
1996-1999 Five International Theorem Proving Championships with SPASS  
1996 Selected PhD Thesis German Informatics Society (GI)

#### Selected Funding Projects

2012-2015 DFG Transregional Collaborative Research Center 14 AVACS  
2012– INRIA project VeriDis

## Metrics

≥80 publications, (DBLP, see <http://dblp.uni-trier.de/pers/hd/w/Weidenbach:Christoph>)

**h-index 22**, ≥2574 citations (Google Scholar)

## Publications

- [1] Jasmin Christian Blanchette, Mathias Fleury, and Christoph Weidenbach. A verified SAT solver framework with learn, forget, restart, and incrementality. In Nicola Olivetti and Ashish Tiwari, editors, *Automated Reasoning - 8th International Joint Conference, IJCAR 2016, Coimbra, Portugal, June 27 - July 2, 2016, Proceedings*, volume 9706 of *Lecture Notes in Computer Science*, pages 25–44. Springer, 2016.
- [2] Thomas Sturm, Marco Voigt, and Christoph Weidenbach. Deciding first-order satisfiability when universal and existential variables are separated. In Martin Grohe, Eric Koskinen, and Natarajan Shankar, editors, *Proceedings of the 31st Annual ACM/IEEE Symposium on Logic in Computer Science, LICS '16, New York, NY, USA, July 5-8, 2016*, pages 86–95. ACM, 2016.
- [3] Christof Fetzer, Christoph Weidenbach, and Patrick Wischnewski. Compliance, functional safety and fault detection by formal methods. In Tiziana Margaria and Bernhard Steffen, editors, *Leveraging Applications of Formal Methods, Verification and Validation: Discussion, Dissemination, Applications - 7th International Symposium, ISoLA 2016, Imperial, Corfu, Greece, October 10-14, 2016, Proceedings, Part II*, volume 9953 of *Lecture Notes in Computer Science*, pages 626–632, 2016.
- [4] Christoph Weidenbach. Automated reasoning building blocks. In Roland Meyer, André Platzer, and Heike Wehrheim, editors, *Correct System Design - Symposium in Honor of Ernst-Rüdiger Olderog on the Occasion of His 60th Birthday, Oldenburg, Germany, September 8-9, 2015. Proceedings*, volume 9360 of *Lecture Notes in Computer Science*, pages 172–188. Springer, 2015.
- [5] Marco Voigt and Christoph Weidenbach. Bernays-schönfinkel-ramsey with simple bounds is nexptime-complete. *CoRR*, abs/1501.07209, 2015.
- [6] Arnaud Fietzke and Christoph Weidenbach. Superposition as a decision procedure for timed automata. *Mathematics in Computer Science*, 6(4):409–425, 2012.
- [7] Christoph Weidenbach and Patrick Wischnewski. Satisfiability checking and query answering for large ontologies. In Pascal Fontaine, Renate A. Schmidt, and Stephan Schulz, editors, *Third Workshop on Practical Aspects of Automated Reasoning, PAAR-2012, Manchester, UK, June 30 - July 1, 2012*, volume 21 of *EPiC Series in Computing*, pages 163–177. EasyChair, 2012.
- [8] Christoph Weidenbach. Combining superposition, sorts and splitting. In John Alan Robinson and Andrei Voronkov, editors, *Handbook of Automated Reasoning (in 2 volumes)*, pages 1965–2013. Elsevier and MIT Press, 2001.
- [9] Andreas Nonnengart and Christoph Weidenbach. Computing small clause normal forms. In John Alan Robinson and Andrei Voronkov, editors, *Handbook of Automated Reasoning (in 2 volumes)*, pages 335–367. Elsevier and MIT Press, 2001.
- [10] Christoph Weidenbach. Towards an automatic analysis of security protocols in first-order logic. In Harald Ganzinger, editor, *Automated Deduction - CADE-16, 16th International Conference on Automated Deduction, Trento, Italy, July 7-10, 1999, Proceedings*, volume 1632 of *Lecture Notes in Computer Science*, pages 314–328. Springer, 1999.