

Curriculum Vitæ

Verena Wolf

Prof. Dr., 27.02.1979, Female, German
Saarland University
Computer Science Department
Campus E1 3
66123 Saarbrücken, Germany
(+49) 681 302-5586
wolf@cs.uni-saarland.de
Professor (W3)



Academic Education

- 2003 Diploma in Computer Science, University of Bonn, Bonn, Germany
 Advisor: Prof. Dr. Christel Baier
- 1998 – 2003 Student of Computer Science, University of Bonn, Bonn, Germany

Scientific Degrees

- 2008 Doctorate in Computer Science (summa cum laude), University of Mannheim, Germany
 Advisor: Prof. Dr. Mila Majster-Cederbaum

Professional Career

- since 2012 Full Professor (W3), Saarland University, Saarbrücken, Germany
- 2009 – 2012 Head of the research group of Modeling and Simulation, Cluster of Excellence,
 Saarland University, Saarbrücken, Germany
- 2008 – 2009 Postdoctoral researcher at the research group Models and Theory of Computation,
 EPFL, Lausanne, Switzerland
 Host: Prof. Dr. Thomas A. Henzinger

Personal Circumstances

- Nov 2011 – Sept 2012 Maternity leave
- Jan 2014 – May 2014 Absence due to ill-health
- May 2014 – May 2015 Maternity leave

Miscellaneous

- Principal investigator of the Collaborative Research Centre 1027 *Physical modeling of non-equilibrium processes in biological systems*
- Associate investigator of the excellence cluster *Multimodal Computing and Interaction*
- Associate editor of the ACM Transactions on Modeling and Computer Simulation
- Member of the *Center for Bioinformatics*, Saarland University
- Member of numerous program committees with the most important ones being: HSCC (2016, 2014); CMSB (2010, 2011, 2013, 2015, 2016); ECCB (2012, 2014); TACAS (2011); SOFSEM (2010); FORMATS (2010); QEST (2010, 2012, 2013);
- Most recent invited talks:
 - *Partial Moment Closures and Rare Event Methods for Stochastic Reaction Networks*. 11th Conference on Computational Methods in Systems Biology, Sept 2013, Institute for Science and Technology Austria, Klosterneuburg, Austria.
 - *Analysis of Markov Population Models*. Workshop on Discrete and Continuous Models in the Theory of Networks, Jun 2013, Zentrum für interdisziplinäre Forschung, Bielefeld, Germany.
 - *Stochastic Hybrid Models of Chemical Reaction Networks*. Workshop on the Numerical Solution of the Chemical Master Equation in Molecular Biology, Sep 2011, Munich, Germany.
 - *Stochastic Hybrid Analysis of Markov Population Models*. Workshop on Models and Logics for Quantitative Analysis, Sep 2011, Aachen, Germany.
 - *Parameter Estimation for Stochastic Models of Chemical Reaction Networks*. Workshop on Computational Models for Cell Processes. Sep 2011, Aachen, Germany.
 - *Stochastic Modelling of Biochemical Networks*. Cold Spring Harbor Computational Cell Biology Summer School, July 2011, Cold Spring Harbor Laboratory, NY, USA.
 - *Stochastic Modelling of Biochemical Networks*. Colloquium talk, Apr 2011, Universität Magdeburg, Germany.
 - *Stability Analysis for Stochastic Chemical Kinetics*. Colloquium talk, Feb 2011, ETH Zürich, Switzerland.
- Young Innovator under 35 Award (Technology Review Magazin, 2013)

Ten most important publications

- [1] C. Baier, J.-P. Katoen, H. Hermanns, and V. Wolf. Comparative branching-time semantics for Markov chains. *Information and Computation*, 200:149–214, 2005.
- [2] J.-P. Katoen, D. Klink, M. Leucker, and V. Wolf. Three-valued abstraction for continuous-time Markov chains. In *Proceedings of the 19th International Conference on Computer Aided Verification (CAV'07)*, volume 4590 of *Lecture Notes in Computer Science*, pages 316–329. Springer, 2007.
- [3] Thomas A. Henzinger, Maria Mateescu, Linar Mikeev, and Verena Wolf. Hybrid numerical solution of the chemical master equation. In *Proceedings of the 8th International Conference on Computational Methods in Systems Biology (CMSB '10)*, ACM International Conference Proceeding Series, pages 55–65, 2010.
- [4] Maria Mateescu, Verena Wolf, Frédéric Didier, and Thomas A. Henzinger. Fast adaptive uniformisation of the chemical master equation. *IET Systems Biology Journal*, 4(6), 2010.
- [5] Verena Wolf, Rushil Goel, Maria Mateescu, and Thomas A. Henzinger. Solving the chemical master equation using sliding windows. *BMC Systems Biology Journal*, 4(42), 2010.
- [6] T. Dayar, H. Hermanns, D. Spieler, and V. Wolf. Bounding the equilibrium distribution of Markov population models. *Numerical Linear Algebra with Applications*, 18:931–946, 2011.
- [7] T. Dayar, W. Sandmann, D. Spieler, and V. Wolf. Infinite level-dependent QBDs and matrix analytic solutions for stochastic chemical kinetics. *Advances in Applied Probability*, 43(4), 2011.
- [8] Aleksandr Andreychenko, Linar Mikeev, David Spieler, and Verena Wolf. Approximate maximum likelihood estimation for stochastic chemical kinetics. *EURASIP Journal on Bioinformatics and Systems Biology*, 9, 2012.
- [9] J. Arand, D. Spieler, T. Karius, D. Meilinger, A. Meissner, T. Jenuwein, G. Xu, H. Leonhardt, V. Wolf, and J. Walter. In vivo control of cpg and non-cpg methylation by dna methyltransferases. *PLoS Genetics*, 8(6), 2012.
- [10] J. Hasenauer, V. Wolf, A. Kazeroonian, and F.J. Theis. Method of conditional moments for the chemical master equation. *Journal of Mathematical Biology*, pages 1–49, 2013.