

DAVID SCHNÖRR

PERSONAL DATA

NAME	David Schnörr
DATE OF BIRTH	26.08.1986 in Heidelberg (Germany)
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EDUCATION

JUNE 2006	Abitur , Carl-Benz Gymnasium Ladenburg (Grade: 1.0 ¹)
2006 - 2012	German Diploma in Physics , Heidelberg University, Final Mark: First
2012 - 2013	Master Thesis : “Error Estimates for a Functional Renormalization Group Approach to the BCS-BEC Crossover” Advisor: Christof Wetterich, Inst. of Theoretical Physics, Heidelberg University
2009 - 2010	International Diploma , Imperial College London
2013 - 2016	PhD , University of Edinburgh. Supervisors: Ramon Grima and Guido Sanguinetti
APRIL 19, 2016	Doctoral Thesis (defense): “Approximation methods and inference for stochastic biochemical kinetics”, Institute of Quantitative Biology, Biochemistry and Biotechnology, University of Edinburgh

AWARDS

JUNE 2006	Ferry-Porsche-Award for Mathematics and Physics Book Award of the Deutsche Physikalische Gesellschaft (DPG)
2009 – 2012	Scholar of the Studienstiftung des Deutschen Volkes (German National Academic Foundation)
2013 – 2016	Scholar of the Biotechnology and Biological Sciences Research Council

TEACHING

2008 – 2009	Tutorial on Theoretical Physics I (Heidelberg)
2010 – 2011	Tutorial on Theoretical Physics II (Heidelberg)
2012	Tutorial I on Mathematics for Natural Scientists (Heidelberg)
2012	Tutorial II on Mathematics for Natural Scientists (Heidelberg)
2014	Tutorial I on Mathematics and Physics for Biologists (Edinburgh)
2014	Tutorial II on Mathematics and Physics for Biologists (Edinburgh)
2015	Tutorial on Mathematics and Physics for Biologists (Edinburgh)

REVIEWER FOR

- The Journal of Chemical Physics
- PLOS One

¹Range: 1.0 (best), 1.3, 1.7, ..., 4.0 (worst).

TALKS

- “Breakdown of the chemical Langevin equation and moment closure approximations for stochastic chemical kinetics”, Mathematical Trends in Reaction Network Theory, July 2, 2015, University of Copenhagen, Denmark.
- “Cox process representation and inference for stochastic reaction-diffusion processes”, Stochastic Dynamical Systems in Biology: Numerical Methods and Applications, June 8, 2016, Newton Institute, University of Cambridge, UK.
- “Cox process representation and inference for stochastic reaction-diffusion processes”, 10th European Conference on Mathematical & Theoretical Biology and SMB Annual Meeting, July 15, 2016, Nottingham, UK.

PUBLICATIONS

- **D. Schnoerr**, R. Grima, and G. Sanguinetti. “Cox process representation and inference for stochastic reaction-diffusion processes.” *Nature Communications* 7 (2016), 11729.
- **D. Schnoerr**, G. Sanguinetti, and R. Grima. “Comparison of different moment-closure approximations for stochastic chemical kinetics.” *The Journal of Chemical Physics* 143.18 (2015): 185101.
- **D. Schnoerr**, G. Sanguinetti, and R. Grima. “Validity conditions for moment closure approximations in stochastic chemical kinetics.” *The Journal of Chemical Physics* 141.8 (2014): 084103.
- **D. Schnoerr**, G. Sanguinetti, and R. Grima. “The complex chemical Langevin equation.” *The Journal of Chemical Physics* 141.2 (2014): 024103.
- **D. Schnoerr**, I. Boettcher, J. M. Pawłowski, and C. Wetterich. “Error estimates and specification parameters for functional renormalization.” *Annals of Physics* 334 (2013): 83-99.

PREPRINTS (SUBMITTED)

- B. Cseke, **D. Schnoerr**, M. Opper, and G. Sanguinetti. “Expectation propagation for diffusion processes by moment closure approximations.” submitted to *Journal of Physics A*; arXiv preprint arXiv:1512.06098 (2015).

David Schnörr
Edinburgh, April 8, 2016