# **Curriculum Vitae Karin Quaas**

Address: Universität Leipzig Fakultät für Mathematik und Informatik Abteilung Algebraische und logische Grundlagen der Informatik PF 100920 D-04009 Leipzig



## **Education**

11/2019	Defense of Habilitation thesis, University of Leipzig
10/2006 - 03/2010	PhD at Institute for Computer Science, University of Leipzig (summa cum laude)
08/2005 - 10/2006	International Master Programme Computer Science, University of Uppsala, Sweden
10/2002 - 08/2005	Studies Computer Science, Logic and Philosophy of Science, University of Leipzig
10/1998 - 10/2002	Studies Media Technology, HTWK Leipzig

# **Work Experience**

10/2022 - now	Assistant professor in the department Algebraische und logische Grundlagen der
	Informatik at the Institute for Computer Science, University of Leipzig
04/2022 - 09/2022	Deputy Professor at the Institute for Computer Science, University of Leipzig
04/2019 - 03/2022	Head of the DFG project Temporal Logics with Constraints
10/2018 - 03/2019	Deputy Professor at the Department of Computing Science, University of Oldenburg
10/2012 - 05/2022	Associated Member of the DFG RTG Quantitative Logics and Automata
04/2011 - 09/2018	Head of the DFG project Verification of weighted timed automata
03/2010 - 09/2018	Postdoc in the department Automata and Languages, University of Leipzig
09/2002 - 08/2005	Scientific assistant at the Institute for Medical Informatics, Statistics and
	Epidemiology, University of Leipzig

# **Scholarships**

10/2008 - 02/2010	"Landesstipendium" of the University of Leipzig
10/2006 - 09/2008	DFG RTG Knowledge Representation

# **Funding/Grants**

04/2023 - 03/2026	DFG, head of the project
0 1/2020 00/2020	Temporal Logics over Finite Strings with the Prefix Ordering (QU 316/6-1)
04/2019 - 03/2022	DFG "Eigene Stelle", head of the project
	Temporal Logics with Constraints (QU 316/4-1)
10/2015 - 09/2018	DFG "Eigene Stelle", head of the project
	Verification of weighted timed automata (QU 316/2-1)
04/2011 - 03/2014	DFG "Eigene Stelle", head of the project
	Verification of weighted timed automata (QU 316/1-1)

## **Stays Abroad**

University of Warsaw, Poland; LSV, Paris Saclay, France; University of Szeged, Hungary; Université Paris Diderot, France; University of Oxford, UK; Irisa/INRIA, Rennes, France; Université Libre de Bruxelles, Belgium; Uppsala University, Sweden

## **Teaching**

Lectures: Theoretical Computer Science, Verification, Real-Timed Automata Seminars: Compilers, Real-Timed logics, Automata over Sets of Atoms,

Selected topics in Automata Theory, Good Scientific Practise

Exercises: Discrete Structures, Logic, Automata and Languages, Computational Complexity Theory, Automata

Theory, Introduction in Classical Logic, Knowledge-based systems

#### **Bachelor- and Mastertheses**

Mastertheses Simon Hosemann "Expressiveness of Logics on Finite Words", 2022

Dominik Peteler "Satisfiability of Constraint LTL on Finite Words with Prefix and Suffix

Relations", 2022

Danny Richter "Bounded MTL Model Checking for Counter Automata", 2017 Anke Bremer "A Qualitative Approach to Weighted Model Checking", 2014

Bachelortheses Jonas Lürig "Die Komplexität des Leerheitsproblems für Einzählerautomaten", 2023

Marvin Großer "Prim. rek. und Ackermannsche Schranken mittels Dicksons Lemma", 2022

Paul Reinhardt "Model-Checking mit Temporalen Logiken für Nested Words", 2020

Nicole Scheeren "Theoretische Probleme im Compilerbau", 2015 Nils Kossack "Das Sprachinklusionsproblem für Zeitautomaten", 2009

#### **Program Committees**

- FoSSaCS 2025
- CONCUR 2023
- 16th International Conference on Reachability Problems (RP), 2022.
- Symposium on Theoretical Aspects of Computer Science (STACS) 2022,
- Computer Science Logic (CSL), 2022
- Found. of Software Technology and Theoretical Computer Science (FSTTCS) (Track B), 2021
- CONCUR 2021
- Highlights of Logic, Games and Automata, 2020
- Computability in Europe (CiE), 2020
- Found. of Software Technology and Theoretical Computer Science (FSTTCS) (Track B), 2019
- Logic in Computer Science (LICS), 2019
- Developments in Language Theory (DLT), 2019
- Formal Modelling and Analysis of Timed Systems (FORMATS), 2019
- Int. Workshop on Methods and Tools for Distributed Hybrid Systems (DHS), 2017
- CONCUR young researchers workshop (YR-CONCUR), 2017
- Formal Modelling and Analysis of Timed Systems (FORMATS), 2016 and 2017
- Synthesis of Complex Parameters (SynCoP), 2016
- Frontiers of Formal Methods (FFM), 2015
- Workshop on Quantities in Formal Methods (QFM), 2012 and 2014

#### **Reviews**

Journal of Theoretical Computer Science, Journal of Computer and System,

Journal of the ACM, Information Sciences, Information Processing Letters, ACM Transactions on Comp. Logic, Soft Computing, Acta Informatica, IEEE Transactions on Software Engineering, Logical Methods in Computer Science, Fundamenta Informaticae, Annals of Mathematics and Artificial Intelligence,

LATA 2014 Special Issue

Conferences DLT 2023, ICALP 2021, STACS 2021, FOSSACS 2021, FSTTCS 2020, ICALP

2020, STACS 2020, CONCUR 2019, FOSSACS 2019, LATA 2019, LPAR 2018, FSTTCS 2018, ICTAC 2018, CSL 2018, ICALP 2018, FOSSACS 2017, STACS 2016, DLT 2015, FFM 2015, FORMATS 2015, LATA 2015, LICS 2015, TACAS 2015, Concur 2014, CSR 2014, DLT 2014, IJCAR 2014, MFCS 2014, QFM 2014 CSL 2013, FCT 2013, ICALP 2013, LICS 2013, STACS 2013

#### **Awards**

• JELIA 2023 Best Paper Award for the paper "First Steps Towards Taming Description Logics with Strings" (together with Stéphane Demri)

#### **Invited Talks**

- Jewels of Automata: from Mathematics to Applications (AutoMathA), Paris 2020 (postponed to 20??)
- 10th Int. Workshop Weighted Automata: Theory and Applications (WATA 2020), Marseille 2020 (postponed to 2021)
- 5th Int. Workshop on Synthesis of Complex Parameters (SynCoP 2018), Thessaloniki 2018
- 8th Int. Workshop Weighted Automata: Theory and Applications (WATA 2016), Aalborg 2016
- 6th Int. Workshop Weighted Automata: Theory and Applications (WATA 2012), Dresden 2012

### **Organisation of Conferences and Workshops**

• Dagstuhl Seminar 21452 *Unambiguity in Automata Theory* (with Thomas Colcombet and Michał Skrzypczak), Schloss Dagstuhl 2021.

#### **Academic Self-Government**

Member of the appeal committee for the following professorships at the University of Leipzig:

- Large Scale Knowledge Management, 2022
- Wissensrepräsentation, 2019-2020
- Algebraische und logische Grundlagen der Informatik, 2014-2015
- Schwarmintelligenz und Komplexe Systeme, 2015
- Computational Humanities, 2014
- Digital Humanities, 2012

#### Languages

German (mother tongue), English, French, Swedish

## Qualifications

2019/2020/2023 Teacher training *Good Scientific Practise*, University of Leipzig
2018 Colloquium *Teaching in Mathematics and Computer Science*, University of Leipzig