Tatjana Petrov September 2023

PERSONAL INFORMATION

Date of birth: 27th December, 1983
Place of birth: Zrenjanin, Serbia
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RESEARCH AREAS

Formal methods, especially model reduction, probabilistic model checking and parameter synthesis. Mathematical and statistical modelling. Systems and synthetic biology. Collective animal behaviour.

LANGUAGES

Serbo-croatian (mother tongue), English (fluent), German (TDN 4, TestDaF-Niveaustufen), Italian (spoken), French (DELF B2)

1 CAREER

1.1 CURRENT AND PREVIOUS POSITIONS

- **University of Trieste, Department of Mathematics, Informatics, and Geosciences**
  Assistant Professor (tenure-track), *9/2023 - Present*
  - researcher of type B contract in the italian academic system
- **Max Planck Institute for Animal Behaviour (Radolfzell, Germany)**
  Affiliate researcher *9/2023 - Present*
- **University of Konstanz, Department of Computer and Information Science**
  Junior Professor (non-tenure-track) *11/2017 - 9/2023*
  - Leading the group "Modelling complex, self-organizing systems" (funded by the Department)
- **Institute of Science and Technology (IST Austria)**
  Postdoctoral Fellow *10/2013 - 07/2017*
  - Hosted by Guet Group and Henzinger Group funded through three personal grants
  - SNSF (Swiss National Science Foundation), Advanced Postdoc. Mobility Fellowship (10/2013- 04/2015)
  - ISTFELLOW (Marie Curie Actions of the European Union's Seventh Framework Programme (FP7/2007-2013) under REA Grant Agreement No. 291734 (declined for the first 18 months, 04/2015-10/2015)
  - SNSF (Swiss National Science Foundation), Early Postdoc. Mobility Fellowship (10/2015-06/2016, with 4-month-long maternity leave from 05/2016-09/2016)
- **Swiss Federal Institute of Technology in Zurich (ETH Zurich)**
  PhD student-assistant *02/2009 - 09/2013*
  - Funded through by the third-party funding of the PhD advisor
  - **Remark**: My PhD was supervised by Prof. Heinz Koeppl and co-advised by Prof.Thomas Henzinger. I did a transfer from EPFL to ETHZ in February 2011, due to Prof. Koeppl's new appointment with ETHZ and the leave of Prof. Henzinger from EPFL to IST Austria.
- **Swiss Federal Institute of Technology in Lausanne (EPF Lausanne)**
  PhD student-assistant *09/2007 - 02/2009*
  - Funded through the Doctoral Program in Computer, Communication and Information Sciences at EPFL (2007-2008) and subsequently by the third-party funding of the PhD advisor.

1.2 CAREER BREAKS

- **Maternity leave** *04/2016 - 10/2016, 05/2022 - 11/2022*

2.1 ACADEMIC DEGREES

- **Swiss Federal Institute of Technology in Zürich (ETHZ)**   Switzerland
  Ph.D.   *June 2013*
  - Thesis title: "Formal reductions of stochastic rule-based models of biochemical reaction networks"
  - Main advisor: Prof. Dr. techn. Heinz Koeppl

- **University of Novi Sad, Faculty of Sciences**   Serbia
  M.Sc. in Computer Science (track for Theoretical Computer Science)   *Sept. 2007*
  - Thesis title: "Elements of space complexity of algorithms"
  - Main advisor: Prof. Dr. Igor Dolinka

- **University of Novi Sad, Faculty of Sciences**   Serbia
  B.Sc. in Computer Science   *Sept. 2006*
  - Thesis title: "Web graphs"
  - Main advisor: Prof. Dr. Dragan Mašulović

2.2 VISITING RESEARCH

- 9/2010 - 12/2010 Harvard Medical School, Department of Systems Biology, Boston; Internship hosted by Prof. Walter Fontana

- 2012 – now, multiple research visits to ENS Paris hosted by Dr. Jerome Feret

- 2010 - now, multiple research visits to IST Austria hosted by Prof.Dr. Thomas Henzinger

- 4/2009, research visit to University of Edinburgh hosted by Prof.Dr. Vincent Danos

- 7/2008, research visit to University of Oxford hosted by Prof.Dr. Daniel Kroening and Georg Weissenbacher

- 5/2006 - 8/2006, Siemens AG, Munich, Germany, internship hosted by Department for Corporate Technologies and Software Engineering (2), topic: Reliable data replication in pervasive systems, as part of an EU Framework Programme 6 Integrated Project Daidalos

2.3 PARTICIPATION AT INTERNATIONAL SCHOOLS

During my PhD and postdoc, I attended several international schools, workshops, and symposiums as a participant, including:

- Simons Institute for the Theory of Computing, Berkeley   *10-14th August 2015*
- SAT/SMT Summer School, Semmering, Austria   *July 10-12th, 2014*
- International Synthetic and Systems Biology Summer School, Taormina, Italy   *June 15th-19th, 2014*
- Towards Systems Biology, Grenoble, France (workshop)   *May 30-31st, June 1st, 2011*
- Quantitative Aspects of Programming Languages (SFM10:QAPL), Bertinoro, Italy   *June 20-26th 2010*
- Computer Science Symposium, IST Austria (symposium)   *May 6th-8th 2010*
- Paris Interdisciplinary PhD Symposium (symposium)   *November 7th-9th 2009*

3.1   EXTERNAL RESEARCH GRANTS AS PRINCIPAL INVESTIGATOR

○ 2020 Vienna Research Group Call "Computational Biosciences" by the Vienna Science and Technology Fund (EUR 1.6 Million over 8 years, including additional mentoring and financial support from TU Vienna), title: BioCosmos - Formal Modelling of Biologically-inspired Complex Stochastic Systems, not funded (shortlisted to the third phase and interviewed among six final candidates)

○ (1/2019-ongoing) DFG (German Research Foundation), Excellence Initiative, title: Centre for the Advanced Study of Collective Behavior (for the funding period 2019-2025, one of the 25 PI's involved), seed funding for me as a PI: 200000EUR

○ (10/2015 - 3/2017) SNSF (Swiss National Science Foundation), Advanced Postdoc. Mobility Fellowship: personal grant for postdoctoral work at IST Austria, title: Executable Gene Regulatory Networks with Memory, 72000CHF

○ (10/2013 - 3/2015) SNSF (Swiss National Science Foundation), Early Postdoc. Mobility Fellowship: personal grant (principal investigator) for postdoctoral work at IST Austria, title: Logic for Synthetic Biology, 66750CHF

○ (10/2013 - 10/2015) ISTFELLOW: personal grant (principal investigator) for postdoctoral work with Calin Guet and Tom Henzinger at IST Austria, the People Programme (Marie Curie Actions) of the European Union's Seventh Framework Programme (FP7/2007-2013) under REA Grant Agreement No. 291734, 94500EUR (declined for the first 18 months)

3.2   INTERNAL RESEARCH GRANTS AS PRINCIPAL INVESTIGATOR: PEER-REVIEWED

○ (3/2022) two CASCB small project grant, for invited speakers from abroad (2170EUR and 1610EUR respectively)

○ (08/2021-ongoing) CASCB Large Grant Call, title: "Data-aware Multilayer Collectives", 416295EUR

○ (07/2021-ongoing) CASCB Medium Grant Call, title: "Modelling collectives with multilayer networks", with Stefano Tognazzi (University of Konstanz), 38523EUR

○ (01/2021-ongoing) CASCB Large Grant Call, title: "Environmental uncertainty shapes rat foraging behavior in large scale environments", with Jacob Davidson (Max-Planck Institute for Collective Behavior) and Ahmed el Hady (Princeton University), 250000EUR

○ (1/06/2020-31/12/2020) small project grant within the cluster of excellence internal call (CASCB, University of Konstanz), title: "Honeybee mass stinging behavior: Data-informed parameter inference for population Markov chains" (for four months funding for student Matej Hajnal), 9000EUR

○ (9/2020) CASCB small project grant, for supporting a conference organization, 10000EUR

○ (1/11/2019-29/2/2020) small project grant within the cluster of excellence internal call (CASCB, University of Konstanz), title: "Deep Reductions for Modelling Collectives" (for four months funding for student Denis Repin), 9000EUR

3.3   INTERNAL RESEARCH GRANTS AS PRINCIPAL INVESTIGATOR

○ (12/2019-ongoing) AFF (Committee on Research, University of Konstanz), title: "Time and Memory in Gene Regulation: TiMinG" (over two-years period, 2020-2021), 13000EUR

○ (3/2019-ongoing) Seed Funding for EU-projects, title: "Time and Memory in Gene Regulation: TiMinG", 4534EUR

○ (1/04/2019-31/10/2019) foreign student allowance for external PhD student (Internationalization funds from the Department for Computer and Information Science, University of Konstanz), title: "Parameter Synthesis for Population Markov Models" (for six months funding for student Matej Hajnal), 9470EUR

○ (1/2018-12/2018) YSF (Young Scholar Fund), title: "Formal modelling of emergent phenomena in Biology" (funding for hiring research associates), 37500EUR

4 Participation and organisation of conferences and workshops

4.1 Invited talks

I was invited to present my works at invitation-only workshops dedicated to specific research topics:

○ 27th October 2022, Rhodes, Greece, I was invited to participate in a panel discussion on the topic "Collective Stupidity and Collective Intelligence" at the REoCAS track at the ISOLA 2022 conference (Rigorous Engineering of Collective Adaptive Systems)

○ 3rd-7th October 2022, Schloss Dagstuhl, seminar Computer Science Methods for Effective and Sustainable Simulation Studies (did not attend due to maternity leave)

○ 19-23 Sep 2022, Heidelberg, Germany, ECMTB (European Conference on Mathematical and Theoretical Biology), invited talk at a mini-symposium organised by Prof. Ramon Grima and Dr. Abhyudai Singh, declined because of maternity protection

○ 8th-13th November 2020, Schloss Dagstuhl, seminar Computer Science Methods for Effective and Sustainable Simulation Studies (did not take place due to Covid-19 pandemics)

○ 15th-17th December 2019, Pharmacology 2019, the annual meeting of the British Pharmacology Society, Edinburgh, invited talk at session named Combining Systems Biology and Artificial Intelligence (AI) for Intelligent Drug Design

○ 2-6th September, 2019, Shonan Village Center, seminar No. 157 Formal methods for the synthesis of bio-molecular circuits, Japan

○ 19th-24th January 2014, Schloss Dagstuhl, seminar: Quantitative Models: Expressiveness, Analysis, and New Applications

○ 15th-19th March 2010, Workshop on Computational Modeling of Biological Systems, Bellairs Research Centre in Holetown, Barbados, invited tutorial (title: Stochastic fragments: A framework for the exact reduction of the stochastic semantics of rule-based models)

○ 29th-30th March 2012, CMACS Workshop on Systems Biology and Formal Methods (WSBF '12), New York University, USA, poster presentation: Approximate reductions of rule-based models

4.2 Seminar talks

I gave the following invited seminar talks or tutorials in purpose of scientific networking and fostering collaboration:

○ Workshop 'Self-organization in space and time' at University of Darmstadt, title: "Formal modelling of biologically-inspired complex, self-organising systems"

○ Seminar series at UKON Department of Biology, title: "Formal modelling of biologically-inspired complex, self-organising systems", 28th April 2022

○ CASCB seminar series (Centre for the Advanced Study of Collective Behaviour), title: "Data-informed parameter synthesis for stochastic population models", 20th May 2019

- IBM Research Zurich, group for Computational systems biology, talk title: "Formal modelling of complex,self-organising systems", 20th December 2018

- University of Konstanz, Logic Colloquium, invited talk titled "BioLogics - logics for modelling gene regulation", 21st June 2018

- University of Konstanz, Workshop Computational Methods, invited talk titled "Formal verification of biological systems", 26th April 2018

- University of Konstanz, internal seminar within the ChemLife excellence initiative, invited talk "Formal methods for modelling signal transduction and gene regulation", 9th November 2017

- Centre for Systems Biology Dresden (CSBD), invited seminar, talk title: "Formal verification of biological systems"

- University of Konstanz, Department of Computer and Communication Sciences, Konstanz (Germany), invited talk, November 2016

- Bio-Medical Informatics Laboratory, Faculty of Engineering, Pavia (Italy), 22nd May 2015

- Department of Mathematics and Informatics, Faculty of Sciences, Novi Sad (Serbia), 30th April 2015

- Microsoft Research Cambridge (England), 14th April 2015

- Antique team Ecole Normale Superiore Paris (ENS Paris), 23rd March 2015

- Institute for Theorerical Computer Science, Masaryk University in Brno, 27th June 2014

- The Open House of the Institute for Automatic Control, ETH Zurich, 28th November 2012, invited presentation on synthetic biology

- The Open House of the Institute for Automatic Control, ETH Zurich, 21st November 2011, presentation on synthetic biology

- Friedrich-Schiller-University Jena, Institute of Computer Science, Bio Systems Analysis Group (Prof. Peter Dittrich), 16th-19th February 2010, invited tutorial: "Stochastic fragments: A framework for the exact reduction of the stochastic semantics of rule-based models"

4.3 Presentations of accepted papers and posters

I gave the following presentations at conferences and workshops where my papers were accepted:

- 17th International Conference on Computational Methods in Systems Biology (CMSB 2019), Trieste, September 2019 (paper presentation)

- 6th Workshop on Hybrid Systems And Biology (HSB 2019), Prague, April 2019 (paper presentation)

- 16th International Conference on Computational Methods in Systems Biology (CMSB), Brno, September 2018 (poster presentation)

- 21st International Conference on Tools and Algorithms for the Construction and Analysis of Systems (TACAS), London, April 2015 (paper presentation)

- 12st European Control Conference (ECC), Zurich, June 2013 (paper presentation)

- Winter Simulation Conference (WSC), Berlin, December 2012 (paper presentation)

- The Third International Workshop on Static Analysis and Systems Biology (SASB), Deauville,September 2012 (poster presentation)

- The Second International Workshop on Static Analysis and Systems Biology (SASB), Venice, Italy, September 2011 (paper presentation)

- Conference on Stochastic Systems Biology, Monte Verita (Switzerland), July 2011 (poster presentation)

- The Forth Annual q-bio Conference on Cellular Information Processing, Santa Fe, New Mexico, August 2010 (poster presentation)

- 7th Workshop on Computational Systems Biology (WCSB), Luxembourg, June 2010 (poster presentation)

- Paris Interdisciplinary PhD Symposium, Paris, December 2009 (poster presentation)

- AllSystemsX Day, Bern, November 2009 (poster presentation)

4.4 ORGANISATIONAL ACTIVITIES

I was the local organization chair and a program co-chair of the following events:

- **Computational Methods in Systems Biology (CMSB 2020)** Konstanz
  Local organization chair and program co-chair *23rd-25th September, 2020*
  * ~150 registered participants, single-track (two and a half days long), held virtually due to Covid-19 restrictions

- **Static Analysis in Systems Biology (SASB 2018)** Freiburg, Germany
  Program co-chair *August 30th, 2018*
  * ~40 participants, single-track (one day long)

4.5 PROFESSIONAL SERVICE AS PROGRAMME COMMITTEE MEMBER

I have served on Program Committee (PC) for several international conferences and workshops, as:

- **PC Co-Chair**
  * Computational Methods in Systems Biology (Konstanz, Sept. 2020)
  * Static Analysis in Systems Biology (Freiburg, Sept. 2018)

- **PC Member (selection)**
  * Fourteenth International Conference on Swarm Intelligence (ANTS), (2024)
  * 3rd Workshop on Quantitative Aspects of Variant-rich Systems (QAVS), (2022)
  * 23rd International Conference on Verification, Model Checking, and Abstract Interpretation (VMCAI), (2022)
  * Computational Methods in Systems Biology (CMSB), (2013-2022)
  * 27th International SPIN Symposium on Model Checking of Software, SPIN (2021)
  * Quantitative Aspects of Variant-rich Systems, QAVS (2021, colocated with ETAPS 2021)
  * 37th Conference on Mathematical Foundations of Programming Semantics (MFPS 2021)
  * 31st International Conference on Concurrency Theory, CONCUR (2020)
  * Numerical Software Verification Workshop (NSV 2019, 2020)
  * International Conference on Formal Techniques for Distributed Systems, FORTE'20 (2020)
  * IEEE International Conference on Computational Intelligence in Bioinformatics and Computational Biology, CIBCB (2020)
  * Hybrid Systems Biology (HSB) (2015, 2016, 2019, 2020)
  * Static Analysis in Systems Biology (SASB), (2012, 2015-2019)
  * 22nd International Conference on Foundations of Software Science and Computation Structures (FoSSaCS) (2019)
  * 16th IEEE International Conference on Computational Intelligence in Bioinformatics and Computational Biology (CIBCB 19)
  * Young Researchers Workshop on Concurrency Theory (YR-CONCUR)
  * Quantitative Aspects of Programming Languages and Systems (QAPL)
  * International Conference on Distributed Computing and Internet Technology (ICDCIT) (2016)

4.6 Professional community service

I am actively involved internally at University of Konstanz for the following service duties:

○ **Cluster of excellence 'Centre for the Advanced Study of Collective Behavior - CASCB**
  * Decision Board Member
  * Grant proposal reviewer
  * Coordinator of a project unit 'Formal Modelling of Collective Behavior' including four principle investigators in total

○ **Member of hiring committees at the Department of Computer and Information Science since 2019**

○ **Member of the Department Council since 2018**

5 Editorial activity

5.1 Guest editor

○ Abate, A., Petrov, T., & Wolf, V. (Eds.). (2020). *Computational Methods in Systems Biology: 18th International Conference, CMSB 2020, Konstanz, Germany, September 23-25, 2020, Proceedings* (Vol. 12314). Springer Nature

○ Ankit Gupta, Tatjana Petrov (Eds.). (2020) *Proceedings of SASB 2018, the Ninth International Workshop on Static Analysis and Systems Biology, Freiburg, Germany - August 28th 2018* (Vol. 350), Electronic Notes in Theoretical Computer Science (ENTCS). Elsevier

5.2 Reviewer for scientific journals (selection)

○ PLOS ONE

○ German Research Foundation (DFG) (proposal reviewer)

○ Biophysical Journal (Elsevier)

○ iScience (Elsevier)

○ IEEE/ACM Transactions on Computational Biology and Bioinformatics

○ Information and Computation (Elsevier)

○ Theoretical Computer Science (Elsevier)

○ Mathematical Structures in Computer Science

○ Biophysical journal (Cell Press)

○ BMC Bioinformatics (Springer Nature)

○ Journal for Swarm and Evolutionary Computation

○ PLOS ONE journal (Public Library of Science)

○ Symposium on Principles of Programming Languages (POPL)

○ Journal of the Royal Society Interface (Interface)

- Proceedings of the Royal Society A (Mathematical, Physical, and Engineering Sciences)

- IFAC Conference on Analysis and Design of Hybrid Systems (ADHS'18)

- Transactions on Modelling and Computer Simulation - TOMACS (ACM digital library)

- Biomedical Circuits and Systems Conference (BioCAS)

6 Awards and recognitions

- Press release for the PLOS Computational Biology publication "Extracting individual characteristics from population data reveals a negative social effect during honeybee defence", with an interview for the University of Konstanz web-publication campus.kn, as well as additional coverage by Eurasia Review, mdr.de, and local and regional newspapers.

- Won the position of Assistant Professor (Tenure-Track) at the University of Trieste, Department of Mathematics and Geosciences (in the Italian system, the position is termed 'researcher of type B, call for the computer science sector'), under negotiation

- Shortlisted for the position of Assistant Professor (Tenure-Track) at the State University of Milan, Department of Informatics (in the Italian system, the position is termed 'researcher of type B, call for the computer science sector')

- Shortlisted for the Vienna Research Group Leader Call 'Computational Biosciences' (WWTF, 2.5Mil.EUR) (December 2020)

- Shortlisted at the Tenure-Track call for women at TU Wien in Austria (October 2020)

- One of 25 PI's in the Centre for the Advanced Study of Collective Behavior (awarded in September 2018)

- Short-listed for the position of Junior Professorship on 'Modelling of Complex Self-Organizing Systems' at University of Konstanz (2016) (position accepted)

- Nomination for ETAPS EASST Best Paper Award in 2016 (ETAPS: European Joint Conferences on Theory and Practice of Software, EAAST: European Association of Software Science and Technology)

- recipient for ETAPS EASST Best Paper Award in 2015 (an A+ ranked conference with acceptance rate 20%)

- SNSF mobility fellowships (Swiss National Science Foundation) for a total of 3 years

- IST Austria and Marie Curie Actions - ISTFELLOW fellowship for postdoctoral work

- Google Anita Borg Memorial Scholarship: Europe, the Middle East and Africa, selected as a finalist

- EPFL Doctoral Program in Computer, Communication and Information Sciences: doctoral school scholarship

- British Scholarship Trust: grant for a short research stay in UK

- Zoran Djindjic Foundation: German Committee on Eastern European Economic Relations and the Delegation of German Business for Serbia and Montenegro, funding for an internship in Germany (2005-2006)

- University of Novi Sad, Dean's list (2003, 2005, 2006)

- Fellowship from the Serbian ministry of science and environmental protection (2001-2005, 2006-2007)

- Honorable award from the Serbian Government for the best final year student (2005-2006)

- Fellowship from the Republic foundation for supporting youth in science and arts (1999-2001)

- High school contest highlights: QUANTA 2000, Lucknow, India: as a member of the Petnica Science Centre team, the second prize in mathematics and the first team prize; First prize on the State level (Yugoslav) competition in mathematics (1997), First prize on the Republic level (Serbia) competition in mathematics (2002, 2001, 2000, 1998, 1996); Third prize on the State level (Yugoslav) competition in physics (2003)

7 TEACHING AND SUPERVISION EXPERIENCE

During my academic career, I obtained teaching experiences as a lecturer, mentor and teaching assistant.

7.1 TEACHING

At University of Trieste, so far, I teach two courses in scope of a newly established track on data science and artificial intelligence: 'Introduction to Artificial Intelligence' for 3rd year Bachelor studies (6h/week, to a total of 9 ECTS credits), 'Multi-agent systems' for Master studies (2h/week to a total of 3 ECTS credits).

At University of Konstanz, I taught four teaching hours per week on average. I have established and implemented a new lecture course 'Probabilistic modelling for computer scientists' (2h/week lecture and 2h/week exercises, to a total of 6 ECTS credits), covering fundamentals of probabilistic verification and statistics. I have established two new seminar courses: one seminar on advanced topics in probabilistic verification and probabilistic reasoning in general. Each seminar is thought 2h/week for 3 ECTS credits.

- **fall 2023**
  * University of Trieste, "Introduction to Artificial Intelligence" (72h, ≈70 students)

- **winter 2022**
  * University of Milan, "Probabilistic model checking for complex, self-organising systems"
  * I was selected for the "BANDO VISITING PROFESSOR "SHORT TERM"" fellowship at the University of Milan (20 hours)

- **winter 2018, winter 2019, winter 2020, winter 2021**
  * University of Konstanz, 'Probabilistic modelling and verification for computer scientists', open for Bachelor and Master students.
  * In 2018, I have fully performed the course myself, including the design of the lecture and exercise sessions, teaching and exercise sessions, preparation and evaluation of the exams. Since 2019, there is a tutor who teaches the exercise sessions, and helps with the preparation and evaluation of exams. (16x2 sessions of 2 hours, 6 ECTS credits)

- **summer 2018, winter 2019, summer 2020**
  * University of Konstanz, 'Current trends in computational modelling of collective behavior'. interdisciplinary seminar for Master students, organized together with the biology department. (16 sessions of 2 hours, 3 ECTS credits)

- **summer 2019, summer 2020**
  * University of Konstanz, 'Probabilistic modelling for computer scientists: advanced topics', seminar. (16 sessions of 2 hours, 3 ECTS credits)

- **summer 2018**
  * University of Konstanz, 'Formal modelling for systems biology', interdisciplinary seminar for Master students, organized together with Prof. Leue, Prof. Schreiber and Dr. Caltais. (16 sessions of 2 hours, 3 ECTS credits)

- **summer 2018**

* University of Konstanz, 'Computational modelling in systems biology and neuroscience', interdisciplinary directed studies for Master students, organized together with Dr. Jacob Davidson (biology department). (16x2 sessions of 2 hours, 6 ECTS credits)

○

winter 2017

* University of Konstanz, 'Formal modelling in systems and synthetic biology', open for Master students. I have performed the course myself, including the design of the lecture and exercise sessions, teaching and exercise sessions, preparation and evaluation of the exams. (16x2 sessions of 2 hours, 6 ECTS credits)

7.2 TUTORING AND EXAM SUPPORT

During my PhD studies, I have been a tutor and examiner for the following courses:

○

spring 2009, spring 2010

* EPFL, 'Theoretical Computer Science', open for Bachelor students (80 enrolled students): instructor(tutor) for exercise sessions, exam evaluation; Prof. Thomas A. Henzinger (lecturer Gregory Theoduloz)

○

fall 2008

* EPFL, 'Introduction to programming languages C', open for Bachelor students (80 enrolled students), tutor for the practical exercise sessions

7.3 MENTORING AND SUPERVISION

7.3.1 RESEARCHERS AT PhD AND POSTDOCTORAL LEVEL

○ Albin Salazar (postdoc, start in September 2023)

○ Julia Klein (PhD, started on 15th March 2022)

○ Wolfram Barfuss (postdoc, expected start in July 2022, declined due to a tenure-track position elsewhere)

○ Stefano Tognazzi (postdoc, 2 years starting from 1st June 2019)

○ Matej Hajnal, research stay (as part of a PhD project, 16 months starting from 1st November 2018)

○ Denis Repin, research stay (2 months starting from 1st November 2018, 6 months starting from June 2019)

○ Mirco Giacobbe, rotation project at IST Austria (October-December 2013)

7.3.2 STUDENT-ASSISTANTS

○ Meenamol Antony (2018/2019), Felix Hinderer (2018), Huy Nhat-Phung (2019/2020), Julia Klein (2020/2021), Abhinav Mittal (2021/2022), Ivan Prigarin (2021/2022).

7.3.3 MASTER PROJECTS, THESIS, AND RESEARCH INTERNSHIPS

○

2021 - Master thesis at Univ. of Konstanz (equivalent to 30 ECTS)

* Ivan Prigarin (main advisor), defence expected in May 2023
* Matteo Ciarrocchi (second advisor), defence expected in November 2022
* Julia Klein (main advisor), defended in February 2022, thesis title: "Applications of Gaussian Processes in Modelling Biological Collectives"

* Meenamol Anthony (main advisor, co-advised with BMW), defended in February 2022, thesis title: "Modelling detection of defect patterns on vehicles to optimize test planning and knowledge discovery in automotive industry"
* Huy Phung (main advisor), defended in May 2021, thesis title: "Bayesian Parameter Synthesis for Markov population models"

○

2021 - Master projects at Univ. of Konstanz (equivalent to 9 ECTS)

* Matteo Chiarrocchi (main advisor), expected start in May 2022
* Ivan Prigarin (main advisor), defended in January 2022
* Julia Klein (main advisor), defended in July 2021
* Meenamol Antony (main advisor), defended in May 2021

○

2020 - Master projects at Univ. of Konstanz (equivalent to 9 ECTS)

* Huy Phung (main advisor), defended in September 2020
* Fabian Klopfer (main advisor), defended in September 2020

○

2017 – Master internship at IST Austria for ENS Paris graduate school

* Andreea Beica, internship (4-month-long visit starting from 24th March 2014, 1 month in summer 2017, 1 month in 2019)

○

2012 – rotation projects at ETHZ – Automatic Control Laboratory (IfA)

* Zahra Karimadini, September-December 2012
* Eirini Arvaniti, September-December 2012
* Marica Stojanov, internship student from June to August 2011

7.4   Participation in thesis committees

7.4.1   Master and Bachelor thesis

○ Georg Wind (Master thesis, first advisor, expected defence in February 2024)

○ Ivan Prigarin (Master thesis, first advisor, September 2023)

○ Paul Reftu (Master thesis, second advisor with Prof. S.Leue, registered in Feb.2022)

○ Julia Klein (Master thesis, first advisor, January 2022)

○ Meenamol Antony (Master thesis, first advisor, February 2022)

○ Ole Ostergaard (Master thesis, second advisor with Prof. B. Goldlucke, 2022)

○ Nhat-Huy Phung (Master thesis, first advisor, May 2021)

○ Pascal Salamon (Master thesis, second advisor with Prof. D.Keim 2021)

○ Jannik Bamberger (Bachelor thesis, second advisor with Prof. B. Goldlucke, 2020)

○ Simon Giebenhain (Bachelor thesis, second advisor with Prof. B. Goldlucke, 2020)

○ Fabian Klopfer (Bachelor thesis, second advisor with Prof. M. Grossniklaus, 2020)

○ Julia Wittenbecher (Master thesis, second advisor with A. Koebach - psychology department, 2019)

○ Christian von Bischopinck (Master thesis, second advisor with S. Leue, 2019)

○ Christian von Bischopinck (Bachelor thesis, second advisor with S. Leue, 2018)

7.4.2 PhD thesis

- Augustinas Sukys, The University of Edinburgh (PhD advisor: Ramon Grima, April 2024)

- Giuseppe Squillace, IMT School for Advanced Studies Lucca (PhD advisor: Mirco Tribastone, April 2024)

- Albin Salazar, ENS Paris, titled "Faithful model reduction of discrete biological systems" (PhD advisor: Jerome Feret, November 2023)

- Jip Josephine Spel, Department of Informatics and Natural Sciences, RWTH Aachen University, titled "Monotonicity in Markov models" (PhD advisor: Joost-Pieter Katoen, July 7th 2023)

- Gerrit Großmann, Department of Computer Science, Saarland Informatics Campus, Saarland University, titled "Stochastic Spreading on complex networks" (PhD advisor: Prof. Verena Wolf, scheduled for November 2022)

- Michael Backenköhler, Saarland University (PhD advisor: Prof. Verena Wolf, to be scheduled in 2022, declined due to maternity leave)

- Candan Çelik, Department of Applied Mathematics and Statistics, Comenius University, 84248, Bratislava, Slovakia (PhD advisor: Prof. Pavol Bokes, scheduled for July 2022, declined due to maternity protection)

- Isabel Cristina Perez Verona (external PhD evaluation committee and examiner, thesis title 'Approaches for the exact reduction of large-scale biochemical models', defense on 20th March 2020 in IMT Lucca, Italy (PhD advisor: Mirco Tribastone)

- Andreea Beica (PhD committee and thesis evaluation committee, thesis title 'Abstractions des Reseaux de Reactions Biochimiques' defense in 6th June 2019 at ENS Paris, France (PhD advisor: Vincent Danos)