

# Agenda

## Monday, April 25, 2022 Master's Day

Room: D-Space (Main Building)

- 9:45 - 10:00 **Check-In**
- 10:00 - 12:00 **Why do your Ph.D.?**  
Hendrik Raetz, Dr. Katharina Baum, Prof. Dr. Felix Naumann, Prof. Dr. Holger Karl  
**Panel Discussion**
- 12:00 - 13:00 **Lunch Break (no catering)**
- 13:00 - 15:30 **Master's Information Day**
- 15:30 - 16:00 **Coffee Break**
- 16:00 - 17:30 **Showcase**  
Wenzel Pünter, Master Thesis Cybersecurity  
**Towards Mining Actionable Cyber Threat Intelligence from Process Behavior Graphs**  
Konstantin Döbler, Master Thesis Data Engineering  
**TBA.**  
Christopher Aust & Ulrike Bath & Florence Böttger & Jonas Krah, Master Project IT  
Systems Engineering  
**Robust Multi-Agent Reinforcement Learning for Scalable Failure Root-Cause Analysis**
- 17:30 - 19:00 **Get-Together with Finger Food**

## Tuesday, April 26, 2022 Future SOC Lab Day

Room: D-Space (Main Building)

- 9:00 - 9:20 **Opening Words**  
Prof. Dr. Andreas Polze, Operating Systems and Middleware Group, HPI
- 9:20 - 11:30 **Industry Talks**  
Andreas Rohnfelder, Fujitsu  
[Quantum-Inspired Computing](#)  
Andrey Hoursanov, SAP SE  
[Quantum Experiments @ SAP](#)  
Jan-David Brustik, Hewlett Packard Enterprise  
[Business Model Innovation in the IT-Industry - Why Circular Economy and Ecosystems are the Key to Success](#)  
Jochen Glaser, SUSE  
[Future Open Source Innovations for SAP Systems](#)
- 12:00 - 13:30 **Lunch Break**  
Steering Committee Meeting  
Poster Session
- 13:30 - 14:15 **Tour of the New Data Center**  
Bernhard Rabe & Dr. Tobias Pape, HPI
- 14:15 - 15:15 **Research Talks I**  
Nadja Veigel, TU Berlin  
[Mining Flood Insurance Big Data to Reveal the Determinants of Humans' Flood Resilience](#)  
Iliyan Nenov & Prof. Dr. George Mengov, Sofia University St. Kliment Ohridski  
[Neurocomputational Economic Forecasting in Turbulent Times](#)
- 15:15 - 15:30 **Coffee Break**
- 15:30 - 16:30 **Research Talks II**  
Stefan Halfpap, HPI  
[Query-Driven Partial Database Replication](#)  
Hendrik Rätz, Wildenstein Plattner Institute Inc.  
[Document Analysis for Cultural Heritage Data](#)
- 16:30 - 17:00 **Closing Remarks**  
Prof. Dr. Andreas Polze, Operating Systems and Middleware Group, HPI

## Wednesday, April 27, 2022 Doctoral Symposium

Room: D-Space (Main Building)

- 9:00 - 9:10 **Opening Words**  
Prof. Dr. Andreas Polze, Speaker of the SSE Research School, HPI
- 9:10 - 9:55 **Keynote**  
Dr. Melissa Densmore, Speaker of the Research School Branch at University of Cape Town  
TBA.
- 10:00 - 11:00 **Session I**  
Huangcheng Hu, Cybersecurity - Enterprise Security Group, HPI  
*Dealing with Bad Apples: Organizational Awareness and Protection for Bit- and Typosquatting Attacks*  
Shohei Katakura, Human Computer Interaction Group, HPI  
*Kerfmeter: Automatic Kerf Calibration for Laser Cutting*  
ZHI Yuan, Nanjing University  
TBA.  
DU Yuntao, Nanjing University  
*Semi-Supervised Learning with Multi-Head Co-Training*
- 11:00 - 11:30 **Coffee Break**
- 11:30 - 13:00 **Session II**  
Pauline Hiort, Data Analytics and Computational Statistics Group, HPI  
*Drug Response Predictions with Networks from Molecular Data*  
Mazhar Hameed, Information Systems Group, HPI  
*An Overview of Data Preparation and Cleaning*  
Marco Cipriano, Artificial Intelligence and Intelligent Systems Group, HPI  
*An Alpha-Shape-Based Approach to Refine Manual Annotations of 3D Medical Targets*  
WANG Yue, Data Engineering Systems, HPI  
*Optimizing Decentralized Window Aggregation*  
Keven Richly, Enterprise Platform and Integration Concepts Group, HPI  
*Budget-Conscious Fine-Grained Configuration Optimization for Spatio-Temporal Applications*  
Tzofnat Greenberg-Toledo, Faculty of Electrical and Computer Engineering, Technion  
*Accelerating Deep Neural Network Applications*
- 13:00 - 14:00 **Lunch Break (no catering)**
- 14:00 - 15:30 **Session III**  
Dorina Bano, Business Process Technology Group, HPI  
*Mining Contextual Information from Event Logs*  
Mary-Jane Antia, University of Cape Town  
TBA.

Felix Grzelka, Operating Systems and Middleware Group, HPI  
Integration of a Clinical Decision Support System for Remote Patient Monitoring

Sumit Shekhar, Computer Graphics Systems Group, HPI  
Low-light Image and Video Enhancement via Adaptive Chromaticity

Johan Bontes, Department of Computer Science, University of Cape Town  
Optimizing NP-Hard Problems Using Local Search

David Sanka Laar, University of Cape Town  
TBA.

15:30 - 16:45 **Poster & Ice Cream Session**

16:45 - 17:45 **Session IV**

Dylan Slack, University of California Irvine  
TBA.

Prof. Erik Sudderth, Speaker of the Research School Branch at University of California  
Irvine  
TBA.

18:00 - open **Ph.D. Student Get-Together**

# Thursday, April 28, 2022 Symposium Day 1

Room: HS 1 (Lecture Building)

12:30 - 13:00 **Check-In**

13:00 - 13:15 **Opening Words**

Prof. Dr. Andreas Polze, Speaker of the SSE Research School, HPI

Prof. Dr. Felix Naumann, Speaker of the DSE Research School, HPI

13:15 - 13:30 **Elevator Pitches - New SSE Members**

Jorge Francesco Ciprian Sanchez (Computer Graphics Systems Group)

Mustafa Ghani (System Analysis and Modeling Group)

Eva Krebs (Software Architecture Group)

Jobin Idiculla Wattasseril (Computer Graphics Systems Group)

Afshin Zivi (Cybersecurity - Enterprise Security Group)

Adrian Jobst (Computer Graphics Systems Group)

13:30 - 13:40 **Elevator Pitches - New DSE Members**

Tahir Miri (Digital Health - Machine Learning Group)

Margarita Bugueno (Artificial Intelligence and Intelligent Systems Group)

Eshant English (Digital Health - Machine Learning Group)

Fabian Stolp (Digital Health - Connected Healthcare Group)

Khawla Rjeb (Data Engineering Systems Group)

13:45 - 14:30 **Keynote**

Dr. Wolfgang Maier, Director of Hardware Development, IBM Research Böblingen  
**How to Cope with Future Compute Demands**

14:30 - 15:00 **Coffee Break**

15:00 - 16:00 **Session I**

Prof. Dr. Maria Keet, University of Cape Town

**Evidence-based and Ontology-driven Logics for Conceptual Data Modelling - the Journey**

Prof. Dr. Heiko Hamann, Universität Lübeck

**Scalability in Robotics and Computing**

16:00 - 16:15 **Coffee Break**

16:15 - 17:15 **Session II**

Kordian Gontarska, Operating Systems and Middleware Group, HPI

**Can we predict death? - Trade-offs in Clinical Decision Support Systems**

Prof. Dr. Peter Tröger, Berliner Hochschule für Technik

**TBA**

17:15 - 17:30 **Coffee Break**

17:30 - 18:00 **Session III**

Dr. Gregor Seiler, IBM Europe  
**Quantum Safe Cryptography**

18:30 - open **Boat Tour and Visit to Museum Barberini**

## Friday, April 29, 2022 Symposium Day 2

Room: HS 1 (Lecture Building)

8:30 - 9:00 **Check-In**

9:00 - 9:30 **Keynote**

Prof. Dr. Timo Hönig, Ruhr Universität Bochum

**System Software for the Next Generation: Energy Efficiency as Core Design and Operating Principle**

9:30 - 11:00 **Session IV**

Prof. Dr. Theo D'Hondt, Vrije Universiteit Brussel

**Memory-Critical Algorithms**

Max Plauth, Operating Systems and Middleware Group, HPI

**Improving Accessibility of Heterogeneous System Resources for Application Developers using Programming Abstractions**

Rana Shahout, Department of Computer Science, Technion

**Real Time Flow Monitoring**

11:00 - 11:30 **Coffee Break**

11:30 - 13:00 **Session V**

Dr. Michael Perscheid, SAP SE

**What's Next after In-Memory Databases or How Does the Future of Business Applications Look Like?**

Justin Albert, Digital Health - Connected Healthcare Group, HPI

**Using Machine Learning to Predict Perceived Exertion During Resistance Training with Wearable Heart Rate and Movement Sensors**

Sarah Dsane-Nsor, University of Cape Town

**TBA.**

13:00 - 13:10 **Closing Remarks**

Prof. Dr. Andreas Polze, Speaker of the SSE Research School, HPI