

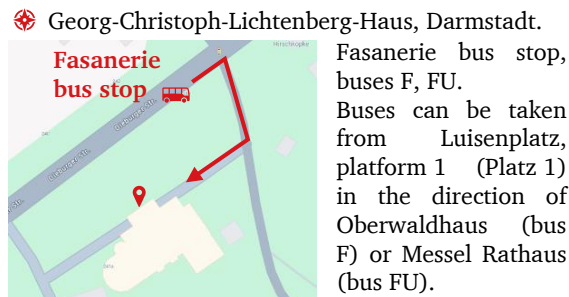
# Critical Infrastructure Interdependencies: A 'System of Systems' Approach

## CONFERENCE PROGRAMME

### Day 1 – 14.11.2023

- 11:00 – 12:45 Check-in & snacks  
 12:45 – 12:55 Greetings by Prof. Dr. Michèle Knodt, a member of KRITIS board  
 12:55 – 13:00 Introduction of the conference team & awareness announcement
- ★ 13:00 – 13:55 **Keynote lecture 1**  
*Crisis, Coordination, and Autonomy: Cape Town's Infrastructure Dilemma*  
 Dr. Shaun Smith (Utrecht University)  
 Moderated by Romeo Dipura, M.Phil.
- 👑 **Panel 1**  
 Measuring & Controlling Critical Infrastructure  
 Moderated by Prof. Dr. Jochen Monstadt
- 👤 14:00 – 14:15 *Measuring Resilience: A Systematic Meta-review*  
Ing. Tony Wei-Tse Hung, M.Sc., Tina Comes, Guilia Piccillo (Maastricht University)
- 👤 14:15 – 14:30 *Distributed Monitoring for Smart Cities: Designing Modular Resilience Embedded Systems*  
Dr. Ladan Khaloopour<sup>1</sup>, Vahid Jamali<sup>1</sup>, Oliver Hohlfeld<sup>2</sup>, Heinz Koeppel<sup>1</sup>, Anja Klein<sup>1</sup>, Matthias Hollick<sup>1</sup>  
 (<sup>1</sup> Technical University of Darmstadt, <sup>2</sup> University of Kassel)
- 👤 14:30 – 14:45 *Autonomous Monitoring and Control Systems Using Digital Twins: A Technological Advancement*  
 Jens Wala, M.Sc. (TU Darmstadt)
- 🗨️ 14:45 – 15:05 Panel discussion
- ★ 15:15 – 16:10 **Keynote lecture 2**  
*Regulatory Framework for the KRITIS Sector Energy*  
 Jonas Haack-Stappel, M.Sc. (German Federal Network Agency)  
 Moderated by Andrew Eliseev, M.Sc.
- 16:10 – 16:20 Closing of day 1 by Sukannya Purkayastha, M.Sc.  
 19:00 Dinner

📍 The speaker for the submissions with multiple authors is underlined.



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### Day 2 – 15.11.2023

- 09:15 – 09:20 Opening of day 2 by Julia Hinze, M.A.
- 👑 **Panel 2**  
 Transformation & Management of Power Grids and Related Networks  
 Moderated by Prof. Dr. Florian Steinke
- 👤 09:20 – 09:35 *Adaptive Survivable Virtual Communication Embedding with an Application to Power System: A Technical Perspective*  
 Dr. Allan Santos (HIF Global)
- 👤 09:35 – 09:50 *Guiding and governing a System of Systems approach to infrastructure networks involved in the energy transition in the EU, through public values*  
 Shakya A. Wickramanayake, L.L.M. (Tilburg University)
- 🗨️ 09:50 – 10:10 Panel discussion
- ★ 10:20 – 11:15 **Keynote lecture 3**  
*System of Systems Thinking for Multi-Infrastructure Interdependency Analysis in Natural Disaster Risk*  
 Dr. David Bristow (University of Victoria)  
 Moderated by Yannick Burmeister, M.Sc.
- 👑 **Panel 3**  
 Building Smarter Cities: Integrating Space, Technology & Digitalization  
 Moderated by Prof. Dr. Martin Knöll
- 👤 11:20 – 11:35 *Challenges for Including Socio-Technical Interdependencies into Digital Twins of Urban Critical Infrastructures: Insights and Solutions*  
Jonas Gunkel, M.Sc., B. Jonathan Sattler, Tobias Gebhard, Andrea Tundis (German Aerospace Center)
- 👤 11:35 – 11:50 *Development Strategies for Smart Cities: A Deep Dive into Urban-Outer Space Nexus via ICT and Simulation Methods*  
 Dr. Ulpia-Elena Botezatu (National Institute for R&D in Informatics-ICI Bucharest/Romanian Space Agency)
- 🗨️ 11:50 – 12:10 Panel discussion
- 12:10 – 13:10 Lunch
- 👑 **Panel 4**  
 The Urban Nexus, Criticality and Transformation of Critical Infrastructure  
 Moderated by Dr. Nadja Thiessen
- 👤 13:10 – 13:25 *Un/Bundling of Infrastructure Systems: Exploring Transformational Processes in Urban Development*  
 Laura Höss, M.A. (TU Darmstadt)
- 👤 13:25 – 13:40 *Systems of Infrastructural (In)justice: Investigating 'Criticality' in Transitional Energy and Mobilities Infrastructures*  
 Dr. David Sadoway (Kwantlen Polytech University)
- 👤 13:40 – 14:05 *Warsaw in the Early Modern Period: An Infrastructural Problem Case*  
 Filip Schuffert, M.A. (University of Regensburg)
- 🗨️ 14:05 – 14:25 Panel discussion
- 14:25 – 14:45 Wrap-up discussion & closing by Sukannya Purkayastha, M.Sc., Julia Hinze, M.A.