



## Critical Infrastructures – interdependencies and consequences from a vulnerability perspective

There are several research challenges in understanding and analysing resilience and vulnerability of interdependent critical infrastructures. This presentation will focus on the analysis of low frequency / high impact events of critical infrastructures, i.e. it will address the realms of Black Swans and Perfect Storms, including cascading effects and societal consequences of infrastructure failures. Our research group in Lund University, Sweden, has been working on modelling interdependent critical infrastructures, on developing methods for vulnerability analyses, and on how to relate vulnerability to risk analysis and decision making.

**Wednesday 20 January**

**12:00–13:00**

**The Gilbert Room, School of Geography and the Environment**

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Jonas Johansson's research interests are resilience, vulnerability and risk management of complex systems, particularly large-scale interdependent critical infrastructures and how society depend on the services these provide. Infrastructure applications include power, railway, telecommunication, and water supply systems. Societal applications include municipal, regional, and governmental aspects of crisis management from a resilience perspective, focusing on interdependencies among societal functions and critical infrastructures. He was previously an infrastructure risk consultant at Grontmij AB, Sweden and a visiting scholar at Johns Hopkins University, USA. He is currently co-PI of the newly formed Center for Critical Infrastructure Protection Research (CenCIP) at Lund University.