

**Colloquium on Software-intensive Systems-of-Systems at ECSA 2016 (SiSoS@ECSA)  
Copenhagen, Denmark, 29 November 2016**

**Chairs: Flavio Oquendo, Muhammad Ali Babar, Khalil Drira, Axel Legay**

Session 1 (9:00 - 10:30): **Design Principles of SoS**, chair: **Elisa Yumi Nakagawa**

- Towards an Architecture Framework for System-of-Systems  
Author: **Bedir Tekinerdogan**
- A System-of-Systems Perspective of the Architecture of OpenStack Cloud Software  
Authors: **Ben Ramsey** and M. Ali Babar
- Cars as constituents of a System-of-Systems  
Authors: **Patrizio Pelliccione**, Eilert Johansson, Tony Larsson, Maytheewat Aramrattana, Magnus Ågren, Göran Jonsson and Rogardt Haldal

Session 2 (11:00-12:30): **Integration, Adaptation and Evolution of SoS**, chair: **Jakob Axelsson**

- Self-Assembling Heterogeneous Interactive Systems  
Authors: Gheorghe Stefanescu and **Ciprian Paduraru**
- Knowledge-driven Evolution of Software-intensive System-of-Systems  
Authors: **Jesper Andersson**, Mauro Caporuscio and Mirko D'Angelo
- Experiment-Driven Adaptation in Software-intensive Systems-of-Systems  
Authors: Ilias Gerostathopoulos, **Tomas Bures**, Vojtech Horky, Christian Prehofer and Petr Tuma

Session 3 (13:30 - 15:00): **Founding Concepts of SoS**, chair: **Patrizio Pelliccione**

- Software Architecture of Software-intensive Systems-of-Systems: Contributions to the State of the Art  
Authors: **Elisa Yumi Nakagawa**, José Carlos Maldonado and Flavio Oquendo
- Synergies of Systems-of-Systems and Microservices Architectures  
Authors: Carlos E. Cuesta, Elena Navarro and **Uwe Zdun**
- Analysis and Innovative Approaches to Smart Management of Software Intensive Systems-of-Systems  
Author: **Tihana Galinac Grbac**

Session 4 (15:30 - 17:30): **Methodologies for Modeling and Management of SoS**, chair: **Uwe Zdun**

- Towards a Framework for Managing Inconsistencies in Systems-of-Systems  
Authors: **Thiago Viana**, Arosha K. Bandara and Andrea Zisman
- Towards a Risk Analysis Method for Systems-of-Systems Based on Systems Thinking  
Authors: **Jakob Axelsson** and Avenir Kobetski
- Towards Methodological Support for Secure Architectures of Software-intensive Systems-of-Systems  
**Jamal El Hachem**, Vanea Chiprianov, M. Ali Babar and Philippe Aniorde
- Multi-scale Modelling for Software-intensive Systems-of-Systems Architectures  
Authors: Ilhem Khlif, Mohamed Hadj Kacem, Cédric Eichler, **Khalil Drira** and Ahmed Hadj Kacem
- A Logic for the Statistical Model Checking of Dynamic Software Architectures  
Authors: **Louis-Marie Traonouez**, Axel Legay, Jean Quilbeuf, Everton Cavalcante, Flavio Oquendo and Thais Batista