



4th Analytic Virtual Integration of Cyber-Physical Systems Workshop (AVICPS)

Sessions: Salon D

Lunch: Tuscany Room

9:00 – 9:10

Introduction and Welcome

Gabor Karsai and David Broman

9:10 – 10:30

Paper Session I: Mathematical Fundamentals

Chair: David Broman

Some Challenges for Model-Based Simulation

Walid Taha and Robert Cartwright

Operational Semantics for a Modular Equation Language

Christoph Höger

10:30 – 11:00

Break

11:00 – 12:30

Paper Session II: Model Integration

Chair: Gabor Karsai

Verifying Consistency Between Models

August Schwerdfeger, Hazel Shackleton, and Steve Vestal

Towards a Safe Compositional Real-Time Scheduling Theory for Cyber-Physical Systems

Linh Thi Xuan Phan

12:30 – 14:00

Lunch

14:00 – 15:30

Discussion session

Challenges and Opportunities in Analytic System Integration

15:30 – 16:00

Break

16:00 – 17:15

Paper Session 3: Model Analysis

Chair: David Broman

Early Phase Memory Leak Detection in Embedded Software Designs with Virtual Memory Management Model

Mabel Mary Joy, Wolfgang Mueller, and Franz Rammig

Refinement of AADL models using early-stage analysis methods

Guillaume Brau, Jérôme Hugues, and Nicolas Navet

17:15

Workshop Closing