

**Philipp Helle** joined Airbus Group Innovations, back then called the EADS Corporate Research Centre, as a researcher in 2003 and is currently a member of the team *Model-based Systems and Software Engineering* in the department *Engineering and Architecture*. He studied linguistics, media culture and computer science at the universities of Karlsruhe and Hamburg and received his MA from the University of Hamburg. Since 2005, he is actively involved in research concerning model-based systems engineering to support complex systems development including model-based testing and model-based safety analysis and has published several papers and articles in these fields.



Philipp's current research work focuses on the following aspects:

- Increasing test automation for testing complex aerospace systems
- Using models to ensure correctness of system specification and design
- Enabling and fostering integration of development and testing activities during product development
- Challenges and solutions for testing autonomous systems

Philipp's main task is forming a link between academia and industrial application and continuing and monitoring the development of new methods from academic research up to their deployment in the Airbus Group business units. He is a member of GfSE, the German INCOSE chapter, and a certified Project Management Professional (PMP).

Philipp has participated in the IARIA SoftNet conferences since 2013 and supported the conferences in various roles. He acted as panel moderator (SIMUL & VALID 2013, 2015) and is part of the technical programme committee for VALID since 2014. In 2014 he was keynote speaker at the SoftNet conference presenting "Research challenges and opportunities in the scope of complex systems development". Furthermore, he has made several scientific contributions to the IARIA conferences and journals.

#### **IARIA scientific contributions:**

- Helle P., Schamai, W., *Using a Generic Modular Mapping Framework for Simulation Model Composition*, SIMUL 2015, November 2015, Barcelona, Spain.
- Helle, P., Schamai, W., *Adaptive Knowledge-Supported Testing: An Approach for Improving Testing Efficiency*. VALID 2014, October 2014, Nice, France.
- Helle, P., Schamai, W. *Towards an integrated methodology for the development and testing of complex systems - with example*. International Journal on Advances in Systems and Measurements 07/2014; 7(1&2):2014.
- Helle, P., Schamai, W. *Towards an integrated methodology for the development and testing of complex systems*. VALID 2013, October 2013, Venice, Italy.