2nd International Workshop on the Adequacy of Modeling Methods (AQEMO'2018)

The focus on adequacy in the design of modeling methods implies that various aspects need to be taken into account to ensure that the method corresponds to the requirements of the given application domain and its different target user groups. This has effects on the modeling language including its syntax, semantics, notation, the modeling procedures and algorithms, as well as on the choice of the actual implementation environment. In this context, it also needs to be described how adequacy can be described and potentially evaluated. This leads to a range of implications such as the evaluation of modeling methods and resulting models in terms of adequacy as well as the learning and teaching of adequacy through experience or structured learning procedures.

The Workshop on the Adequacy of Modeling Methods aims at establishing a platform for interested researchers and practitioners to exchange ideas and reveal co-operation opportunities. The second edition of the AQEMO workshop was held in Braunschweig as a satellite event of the Modellierung'2018 conference. As only one paper has been submitted and accepted for the workshop, it was decided to join it with two papers submitted to the International Workshop on Petri Nets and Modeling (PeMod) as well as to include two keynotes as invited talks and a panel discussion.

At the beginning of the workshop, *Bernhard Thalheim* gave a keynote on the foundations and future research challenges of model adequacy based on the the Kiel compendium of models, modeling activities and systematic modeling. For this purpose, he referred to two modeling methods from the domain of data modeling. Subsequently, *Mathias Uslar* and *Sebastian Hanna* presented a three-dimensional visualization approach for the RAMI 4.0 reference model for Industry 4.0 architectures that aims to reduce the modeling effort for the requirements engineering of complex technical solutions. In the following, two papers from the PeMod'2018 workshop were presented that showed a new visualization approach for the synthesis of Petri nets and an approach for a combination of reconfigurable and hierarchical Petri nets. In the second keynote of the workshop, *Stefan Strecker* discussed the concepts of model evaluation and model quality with references to aspects of linguistics, philosophy of language, cross-disciplinary fields and fundamental considerations in other branches of philosophy. The workshop was concluded with a panel discussion led by *Heinrich C. Mayr* involving all speakers as well as the organizers of the AQEMO and the PeMod workshop on the challenges and future research questions in the context of model adequacy.

AQEMO would not have become reality without the support of a number of people. First, we are very grateful to the authors and keynote speakers for their intensive work. Second, we would like to thank the program committee members for providing timely and thorough assessments. Furthermore, our thanks go to the Modellierung 2018 organizers for hosting this workshop.

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