## **Preface**

First, we want to thank our sponsor  $(CM)^2$  – Center for Mathematical and Computational Modelling for financial support and to host this event.

The aim of this symposium is to bring together young researchers from various fields. Its interdisciplinary character is underlined by the support of the University of Kaiserslautern, DFKI, Fraunhofer ITWM, IVW, and the Rhineland-Palatinate research initiative. With more than 40 participants and 14 submissions, the first YRS demonstrated the strength and interest in such an event. In a relaxed atmosphere, young researchers were able to discuss new ideas for cooperations and support.

These proceedings contain peer-reviewed and accepted contributions from the domains *materials characterization*, *production processes*, *economics*, and *system-on-chip design (SOC)*. The close relationship to mathematics and computer science, which is essential to engineers and natural scientists, was always visible and will help to advance progress in relevant areas.

The top three contributions were awarded by the committee and the audience. The winners are: "Hardware Accelerators for Financial Mathematics – Methodology Results and Benchmarking" by Christian De Schryver, Henning Marxen, and Daniel Schmidt (first place), "Mathematical Optimization Based Channel Coding: Current Achievements and Future Challenges" by Michael Helmling, Stefan Scholl, and Akin Tanatmis (second place), and "Zur Untersuchung von stahlfaserverstärkten Betonen auf Basis der 3D-Computer-Tomographie" by Frank Schuler and Katja Schladitz.

We thank the authors for their submissions and the program committee for their hard work.

Nachwuchsring des  $(CM)^2$ 

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