

# workshop Komplex D

## efficiency, meta models and reduction methods

SPP 1886: Polymorphic uncertainty modelling for the numerical design of structures

Maschinenbauhörsaal H17, Immerwahrstraße 1, 91058 Erlangen

### Tuesday March 14, 2017

- 14:00 welcome and introduction
- 14:30 Daniel Rixen, Chair of Applied Mechanics, Technical University of Munich  
*Model reduction of non-linear dynamic models: a path in the jungle*
- 15:30 Michael Hanss, Institute of Engineering and Computational Mechanics, University of Stuttgart  
*Fuzzy arithmetic and probability theory – complementary or conflictive*
- 16:00 coffee break
- 16:30 Wolfgang Graf, Institute for Structural Analysis, Technical University of Dresden  
*Polymorphic uncertainty modelling and reduction methods*
- 17:30 discussion in groups on meta models and reduction methods in the individual projects
- 19:00 dinner at ZEN Bar

### Wednesday March 15, 2017

- 9:00 Maliki Moustapha, Chair of Risk, Safety and Uncertainty Quantification, ETH Zurich  
*Surrogate modelling for uncertainty quantification, reliability analysis and optimization*
- 10:00 Lars Grasedyck, Institute for Geometry and Applied Mathematics, RWTH Aachen University  
*Hierarchical low rank tensors and model reduction*
- 11:00 coffee break
- 11:30 discussion in groups on meta models and reduction methods in the individual projects
- 12:30 overview on meta models and reduction methods in the individual projects
- 13:30 end of the workshop