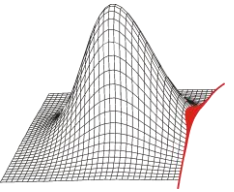


# Agenda

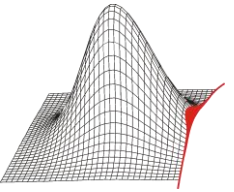
## Thursday, October 10, 2019



- 11:00–13:00 *Registration; Zeunerbau, Room 255*
- 12:00–13:00 *Lunch break*
- 13:00–13:15 *Welcome; R. Mailach; Technische Universität Dresden*
- 13:15–13:45 „Data-intensive High Performance Computing at TU Dresden: Combining Computer Science Research with Support for Computational Sciences“  
A. Knüpfer; *Technische Universität Dresden*
- 13:45–14:15 “Deep Gaussian Covariance Network – Machine Learning based on Probabilistic Intelligence”  
K. Cremanns, D. Roos; *Niederrhein University of Applied Sciences*
- 14:15–14:45 “Bayesian Robust Design Optimization using Deep Gaussian Covariance Network”  
C. Bogoclu, D. Roos; *Niederrhein University of Applied Sciences*
- 14:45–15:00 *Coffee break*
- 15:00–15:30 “Mixed aleatoric-epistemic uncertainty quantification for jet engine applications”  
G. Antinori; *MTU Aero Engines AG*
- 15:30–16:00 „Meta-model-based Quality Assessment of Sample Estimates“  
A. Prots; *Technische Universität Dresden*
- 16:00–16:30 “Spectre-UQ: A Computational Environment for Managing Total Uncertainty Quantification of CFD Studies”  
E. P. N. Duque; *Intelligent Light*
- 19:00 *Dinner at [Feldschlößchen Stammhaus](#)  
Budapester Straße 32, 01069 Dresden*

# Agenda

## Friday, October 11, 2019



- 09:00–09:30 „The Deterministic Model as Part of Probabilistic Analysis: Shortcomings and Potential for Development of CFD for Turbomachinery“  
L. Wein; *Leibniz Universität Hannover*
- 09:30–10:00 “An industry ready approach to the characterization and reduction of manufacturing uncertainties“  
S. Albert; *NUMECA*
- 10:00–10:30 “Digital Twin – Analysis of Static and Dynamic Geometric Phenomena – From Data Acquisition to the First Insight“  
J. Scharfenstein, S. Wallstab-Freitag; *GOM*
- 10:30–10:45 *Coffee break*
- 10:45–11:15 “Condition-based classification of compressor blades“  
J. Marx; *MTU Maintenance Hannover GmbH*
- 11:15–11:45 “Comparison of Probabilistic Assessments utilizing Geometric Inputs of Different Quality“  
P. Magin; *MTU Aero Engines AG*
- 11:45–13:00 *Lunch break*
- 13:00–13:30 “Efficient stochastic modelling of an axial compressor rotor blades geometrical variability due to manufacturing uncertainties“  
M. Gambitta; *Brandenburg University of Technology*
- 13:30–14:00 “Comparison of the Elementary-Effects Method and the Coefficient-of-Importance Using a One-dimensional Cooling Flow Network“  
B. Fiedler; *MTU Aero Engines AG*
- 14:00–14:30 “Forecasting the Condition of HPT Parts by using BBN“  
D. Giesecke; *Technische Universität Braunschweig*
- 14:30–14:45 *Coffee break*
- 14:45–15:15 „Explanation of Surface Deviations by Manufacturing Modes“  
J. Urbano<sup>1</sup>, D. Bestle<sup>1</sup>, U. Gerstberger<sup>2</sup>, M. Meyer<sup>2</sup>;  
<sup>1</sup>*Brandenburg University of Technology*, <sup>2</sup>*Rolls-Royce Deutschland*
- 15:15–15:45 “Towards the robust aerodynamic shape optimization of compressor blades“  
M. Meyer; *Rolls-Royce Deutschland*
- 15:45–16:15 „Probabilistic FE-Analysis of Cooled High Pressure Turbine Blades“  
L. Högner; *Technische Universität Dresden*
- 16:15 *Closing*; R. Mailach; *Technische Universität Dresden*