



## 11. Dresdner-Probabilistik- Workshop

From Digital Twin to Artificial Intelligence

10 - 11 October 2019

CALL FOR PRESENTATION

# 11. Dresdner-Probabilistik-Workshop

Technische Universität Dresden

Chair of Turbomachinery and Flight Propulsion

Prof. Dr.-Ing. habil. Ronald Mailach

10 - 11 October, 2019

## Call for Presentations

Topic:

From Digital Twin to Artificial Intelligence

Conference venue:

TU Dresden, Zeunerbau

The workshop will provide a discussion platform for engineers from research and development on the topics of statistics, digital twin, probabilistic, artificial intelligence.

For the 10 and 11 of October, presentations from industry and academics are scheduled. These presentations should target on scientific and technical questions as well as discuss potential applications of probabilistic methods in mechanical engineering. It is requested to avoid commercial aspects.

A dinner for the exchange of experiences will be offered in the evening of 10 October at the city center of Dresden.

Each contribution should consist of a 20-minute presentation followed by 10 minutes of discussion. Presentation can be published on the workshop website [www.probabilistic.info](http://www.probabilistic.info).

### Deadline:

Registration of presentation:  
10 July 2019

### Conference fee:

150,00 Euro excl. VAT, includes snacks, lunch and dinner

### Registration and Contact:

Dr.-Ing. Matthias Voigt  
Chair of Turbomachinery and Flight Propulsion  
TU Dresden, 01062 Dresden  
<http://www.probabilistic.info>  
E-mail: [matthias.voigt@tu-dresden.de](mailto:matthias.voigt@tu-dresden.de)  
Tel.: +49 351 463 33962

### Already confirmed presentations:

Marx, J. (MTU Maintenance Hannover GmbH): "Condition-based classification of compressor blades"

Magin, P. (MTU Aero Engines AG): "Comparison of Probabilistic Assessments utilizing Geometric Inputs of Different Quality"

Fiedler, B. (MTU Aero Engines AG): "Comparison of the Elementary-Effects Method and the Coefficient-of-Importance using a One-dimensional Cooling Flow Network"

Wein, L. (Leibniz Universität Hannover): "Das deterministische Modell als Teil probabilistischer Analysen: Defizite und Entwicklungspotenziale der Strömungssimulationen von Turbomaschinen"

Giesecke, D. (Technische Universität Braunschweig): "Forecasting the Condition of HPT Parts by using BBN"

Knüpfer, A. (Technische Universität Dresden): "Datenintensives Hochleistungsrechnen am ZIH -- Forschung und IT-Dienste für die Forschung"

Högner, L. (Technische Universität Dresden): "Probabilistic FE-Analysis of Cooled High Pressure Turbine Blades"

Antinori, G. (MTU Aero Engines AG): "Mixed aleatoric-epistemic uncertainty quantification for jet engine applications"

Prots, A. (Technische Universität Dresden): "Metamodell basierende Güteeinschätzung von Ergebnisgrößen probabilistischer Simulationen"

Bogoclu, C.; Roos, D (Niederrhein University of Applied Sciences): "Bayesian Robust Design Optimization using Deep Gaussian Covariance Network"

Cremanns, K (PI Probabiligence GmbH); Roos, D. (Niederrhein University of Applied Sciences): "Deep Gaussian Covariance Network - Machine Learning based on Probabilistic Intelligence"

You are invited to contribute to the workshop. Please register your presentation by 10 July to [matthias.voigt@tu-dresden.de](mailto:matthias.voigt@tu-dresden.de).