

# Einladung zur Ringvorlesung „Simulationswissenschaften“

Freitag, 13. April 2018, SWZ-Seminarraum 324 (C9), TU Clausthal, 16:15 Uhr

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spricht über das Thema

## **Modeling and simulation based approaches in aeronautical Informatics**

### Inhalt des Vortrags:

Aeronautical informatics is advancing rapidly through the synergy between Information and Communication Technologies (ICT) and aeronautics. The history of aeronautics starts with the pioneer era. The introduction of mechanically powered controls is called the second era. The third era is characterized by the utilization of computers and automation in aircraft. Now, we are moving towards the Flight 4.0: the fourth era which emphasize “smart” and “connected” flight. Flight 4.0 promotes extensively exploiting the emerging ICT, such as Cloud/Fog/Edge Computing, Internet of Things, Cyber Physical Systems or Big Data. Along with that, the rise of unmanned aerial systems, new urban aviation concepts and future air traffic management systems are asking for innovative solutions. For democratization of engineering and stimulating the innovation potential of Small and Medium Size Enterprises (SMEs) and startups, we need new affordable and accessible tools, methods and techniques for designing, developing and assuring automation and autonomy across system boundaries. This talk elaborates modeling and simulation based approaches and promotes standardization and open-source for model based design, and simulation based analysis, training, validation and verification for achieving the future “smart” and “connected” flight. It further introduces the related research efforts of German Aerospace Center (DLR) - Clausthal University of Technology collaborative research group on aeronautical informatics.

**Gäste sind herzlich willkommen.**

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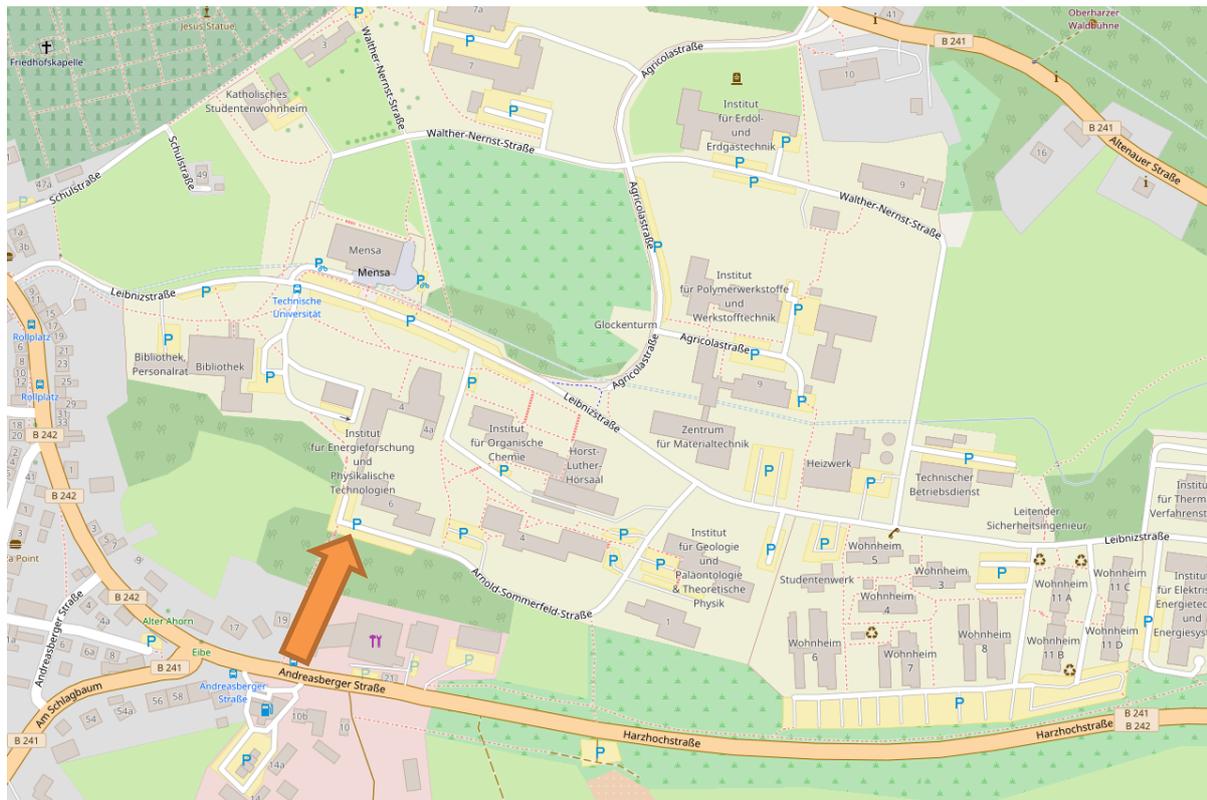
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GÖTTINGEN

Der Vortrag findet in folgendem Gebäude statt:

**Simulationswissenschaftliches Zentrum  
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