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## Advanced Seminar

# Generalized Continua in Engineering

## Theory, Experiments and Applications

### 2<sup>nd</sup> Circular

**Date:** 03-07 September 2018

**Organized by:**

**Wolfgang Müller**

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Generalized Continua have recently seen a formidable renaissance: A first summary was given in 1909 by the Cosserat brothers. Their ideas stayed dormant for a while and were picked up after World War II by Ericksen & Truesdell resulting in a continuous stream of theoretical papers until today. Most recently the theory was complemented by applications and embedded in experiments focussing on how to determine the various new material parameters required for making the theory applicable. During the last few years various colloquia held in Paris (2009), Wittenberg (2010, 2012), and Magdeburg (2015), as well as the CISM Course “Generalized Continua - from the Theory to the Engineering Applications” (Udine, 2011) helped to promote this type of research. During this new Advanced Seminar attention will be paid on the most recent research items, e.g., new generalized models, materials with significant microstructure, multi-field loadings or identification of constitutive equations. Last but not least, a comparison with discrete modelling approaches and experiments will be discussed.

### **Important dates:**

Abstract submission (extended): **01/06/2018**

Notification of abstract acceptance: 15/06/2018

Registration opens on: 16/06/2018

Registration deadline: 01/07/2018

Camera-ready paper submission deadline:  
01/10/2018

On-site registration: 03/09/2018

Conference dates: 03-07/09/2018

### **Scientific Board:**

**Holm Altenbach** (Co-chair)

**Wolfgang H. Müller** (Chair)

**Victor Eremeyev** (Gdańsk, Poland)

**Francesco dell’Isola** (Roma, Italy)

**Samuel Forest** (Paris, France)

**Elena Grekova** (St. Petersburg, Russia)

**Elena Vilchevskaya** (St. Petersburg, Russia)

## Publication:

The conference papers accepted after review will be published by Springer in the Series “**Advanced Structured Materials**” (<http://www.springer.com/series/8611>).

## Registration and other Fees:

Euro (€)	
210	Regular participant
260	On-site registration
10	City tour Berlin
40	Excursion
50	Banquet

The regular fee includes: welcome reception, proceedings, and coffee breaks.

City tour, excursion, and banquet should be booked for each person (participant and accompanying person) separately.

The conference fee should be paid before **1 July 2018**.

The account details will be announced with the letter of acceptance.

## Venue:

The conference venue is at the Institute of Mechanics at the Technical University of Berlin, Einsteinufer 5, 10587 Berlin, Germany.



Nearby the Institute are various hotels and restaurants, pubs, etc. It is conveniently located within reach to all the important sights of the City of Berlin.

For further information please visit the homepage of Berlin <https://www.berlin.de/>



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You can reach the Institute

By car

- Coming from the North - Hamburg/Rostock (A24 autobahn)
- from the West Hannover (A2) and
- from the South (Munich, Leipzig) (A9)

By rail

- At Central Station take a regional train or S-Bahn

By plane (Berlin has two airports)

- Tegel: This airport is very close to the Main Campus.
- Schönefeld: This one is across the city.

## Contact:

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