

26.09.2018

## Announcement – Guest Lecture

The Braunschweig Pavement Engineering Centre (ISBS) is honored to invite you to a Guest Lecture in Asphalt Pavement Engineering:

### *Thermo-rheological behaviour of bituminous materials and focus on Linear viscoelasticity*

**Hervé Di Benedetto, Professor, University of Lyon/ENTPE**  
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**Tuesday, November 6th, 2018, 09:30–11:00**, ISBS, Matthäi-Seminarraum,  
Beethovenstraße 51 b.

**Target Audience:** Bachelor and Master Students of Bauingenieurwesen,  
Wirtschaftsingenieurwesen/Bau, Umweltingenieurwesen and  
Verkehringenieurwesen.

This course gives an introduction to the complex thermo-rheological behaviour of bituminous materials, which includes very different aspects such as: Linear viscoelasticity, Non linearity, Fatigue, Healing, Thixotropy, Crack propagation, Permanent deformation, Brittle failure, Viscoplastic flow, Thermo-mechanical coupling. Each of these phenomena is observed for a given domain of loading which is observed either in the pavement or during laboratory tests.

A focus is presented for the linear viscoelastic behaviour, which is observed for “small” loading amplitudes.



**Professor Hervé Di Benedetto** received his Diploma of Civil Engineer from the "Ecole Nationale des TPE" (ENTPE, University of Lyon) and his PhD from the University of Grenoble, France.

Currently he is Professor at ENTPE, University of Lyon. He is also, since 2011, visiting Professor at the University of Quebec (ETS). He is member of “Laboratoire de Tribologie & Dynamique des Systèmes” (LTDS, UMR CNRS 5513) where he is leading the team “Geomaterials and Sustainable Construction”.

Prof. Di Benedetto’s research activities focus on the study of mechanical, thermo-mechanical and structural behaviour of geomaterials, including experimental and modelling aspects. He is working in the fields of soil mechanics and road engineering.

He has been the supervisor of many research projects. He is the author of more than 200 publications. He is Editor-in-Chief of the International Journal “Road Materials and Pavement Design” (<http://www.tandfonline.com/loi/trmp20>).

Professor Di Benedetto is a well know expert, which is frequently invited for keynote speaker for international conferences.