



## Lecture No. 66

**Czech Society for Mechanics  
and Institute of Thermomechanics, CAS**

invite you to a lecture and discussion within  
the lecture series **Institute of Thermomechanics Seminar**

### Shock wave propagation in complex media: an experimental contribution to dynamic behavior of materials at very high strain rates

given by

**Prof. Michel Arrigoni**

ENSTA Bretagne, Brest, France

High added value technologies, as well as critical infrastructures in service, are more and more subjected to severe loadings. In order to increase their survivability in harsh environment, structures and materials have to be characterized under dynamic conditions such as crash test, ballistic impact and blast loading. During these extreme events, it is not always easy to implement sensors able to catch the evolution of physical parameters. The presented work exposes an experimental contribution to the characterization of shock wave effects and propagation in materials and on structures. Cases of study are split into two categories: soft impacts and hard impacts. This includes the use of instruments developed for this intention, such as shock pressure gauges and laser Doppler velocimeters and non-destructive techniques for damage assessment.

**The lecture will be held on Monday, June 10, 2019 at 13:00 in the building  
of the Institute of Thermomechanics (lecture room B), Dolejškova 5, 182 00 Prague 8**