

## Institute of Thermomechanics Seminar http://www.it.cas.cz/en/it seminar



#### Lecture No. 73

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

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

# Digital image correlation: from static tests to X-ray tomography and high strain-rate loading

given by

### Prof. Ondřej Jiroušek

Faculty of Transportation Sciences, Czech Technical University in Prague

In the short lecture an overview of digital image correlation (DIC) applied to strain measurement of samples loaded in mechanical tests in general will be given. Examples of using the method in several engineering applications will be given, extension of the method that enables to use it in 3D (using time-lapse tomography) will be introduced and examples of experiments performed on a wide range of materials, ranging from trabecular bone samples, whole bone samples (vertebral bodies) to metallic foams will be presented. A special attention will be given to high-strain rate loading using Split Hopkinson Pressure Bar technique.

The lecture will be held on Wednesday, October 2, 2019 at 10:00 in the building of the Institute of Thermomechanics (lecture room B), Dolejškova 5, 182 00 Prague 8

Contact persons: Radek Kolman, Hanuš Seiner