

## **Determination of model parameters from laboratory tests results and constitutive simulations**

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### **Exercise on Laboratory Experiment**

As an application of the theoretical aspects presented in the courses “Laboratory Experiments”, “Main THM Processes and Field Equations” and “Modelling of thermo-mechanical Behaviour of Soils”, this exercise session aims to determine the Cam-Clay model parameters of a host formation from laboratory experimental results. The elastic modulus and the plastic parameters will be determined based on experimental curves on characteristic paths (triaxial and oedometric compression paths). So doing, this exercise enables to understand the fundamental aspects of the constitutive behaviour of soils. In particular, the critical state concept as well as the plastic compressibility of soils will be discussed. The pre-requisites to attend to this session are the basic notions of stress-strain relations and the use of Excel software.