

# **INTRUSION 2023**



**Monday 03 July 2023 - Wednesday 05 July 2023**

**Campus Universitario Ernesto Quagliariello, Bari, Italy.**

## **Scientific Programme**

Reliable models for forecasting and managing water resources in an ecological transition framework ask for accurate and robust numerical methods for dealing with critical zone modeling. To this purpose, this workshop aims at bridging the gap among lexicon and contents of geosciences, hydrology, soil science, ecology, applied mathematics and numerical analysis, trying to trigger novel mathematical modeling approaches and numerical methods in these frameworks: for instance, multiphysics coupling, nonlocal models and methods, control techniques, polytopal element methods, happening over different dimensions, e.g., either through interfaces or in the bulk. We encourage the presentations of applications related to water resources management, poromechanics, contaminant and multiphase flow, with the idea of fostering interconnections between mathematical and numerical novelties and hydrological and environmental model applications. The workshop makes part of the activities of IMACS technical committee Mathematical and Numerical Modelling of Porous Media in Subsurface Environments.