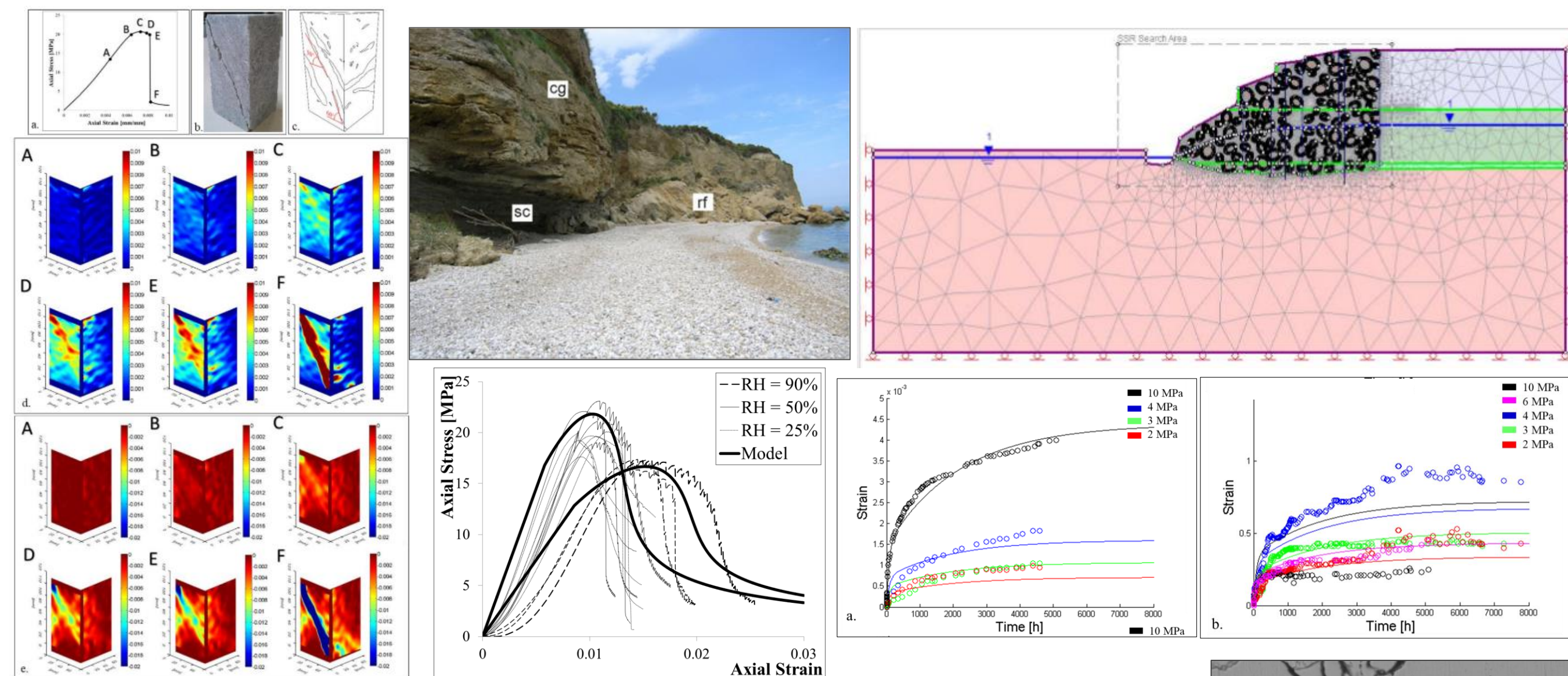


Session EMRP1.7 – Laboratory characterization and numerical modelling of soft rocks

Abstract submission deadline
January 15th 2025 (13:00 CET)

Conveners
Chiara Caselle
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The session focuses on the laboratory characterization and modeling of the thermal-hydraulic-mechanical-chemical (THMC) behaviour of weak/soft rocks and rock masses, i.e., rocks that, due to their intrinsic low mechanical properties and/or to the effect of weathering or deformative processes, have a transitional mechanical behaviour between rocks and soils. They represent a challenge in several geoenvironmental contexts, due to their low strength, high heterogeneity, high proneness to drastic weathering or fracturing processes, and to the fact that they can develop time-dependent and water-interaction-dependent deformations (e.g., creep, swelling, squeezing). Despite these materials raised big attention in the geotechnical and rock mechanics scientific communities in the last decades, several questions remain open about the understanding of the complexity that drives their behaviour, posing risks to the safety and longevity of infrastructures and to the stability of natural slopes and seacliffs. For these reasons, this session proposes to collect contributions about the THMC behaviour of soft rocks and rock masses, welcoming laboratory, modeling and case studies topics, with the objective of revealing our capability of effectively characterize and predict the behaviour of these materials.

We look forward to seeing you in Vienna!

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