

Fractures and faults are common tectonic features within shallowly deformed rocks. Fracture networks play a fundamental role in fluid migration. Understanding the mechanical and chronological development of fracture networks is therefore key for tectonic studies as well as for resources exploration and waste repositories studies.

This session aims at bringing together scientists working in the field, in the lab, and on simulations to foster discussion towards improving our understanding of (1) the mechanics, occurrence, timing and stress history of fractures in upper crustal rocks, and (2) the role fracture networks play on subsurface fluid flow. We welcome contributions from all fields, including structural geology, mechanics, isotope geochemistry, and hydrogeology that aim at comprehending the development of fracture systems in time and space and their co-evolution with fluid flow in a variety of geological settings.