

Fold-and-thrust belts and accretionary prisms are key geological features occurring all around the globe. They mostly develop along convergent plate boundaries although they may also form along passive margins or other super-critical slopes by a gravitationally driven stress field. Fold-and-thrust belts can display a varied range of scales, may involve the whole continental lithosphere or just the uppermost sedimentary cover and can differ in their spatial extent, longevity of their formation and the rock types involved. Their geometry and kinematic evolution strongly depend on an ample variety of parameters (rheology, temperature, surface processes, structural inheritance, mechanical stratigraphy...), the understanding of their effects being fundamental for the comparison of different fold-and-thrust belts and the development of common predictive models.

Fold-and-thrust belts have been intensely investigated, aiming to decipher their short- and long-term evolution. However, there are important questions that remain not fully understood: i) What is the effect of structural inheritance, décollements, syn-tectonic sedimentation and the interplay between them on mountain building processes? ii) How are transient and long-term rheological/mechanical characteristics and processes affecting the evolution of fold-and-thrust belts? iii) How can we better define deep orogenic geometries and better reconstruct the burial, thermal and kinematic evolution of orogens?

The here proposed session tackles these questions by considering a multidisciplinary approach. We look forward to receiving abstracts focusing on the short- and long-term dynamics and the geometry and structural evolution of fold-and-thrust belts by means of different methodological approaches, including (but not limited to) field structural geology, cross-section construction and balancing, 3D structural modelling, seismics and seismology, analogue and numerical modelling, rock mechanics, geomorphology, thermochronology and geophysics.