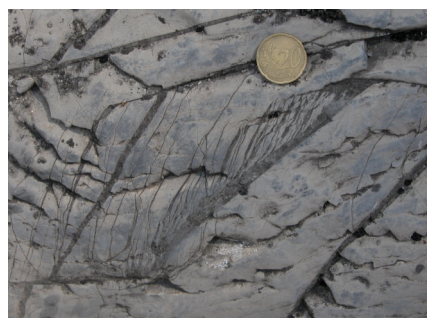


Structural Geology, Tectonics and Regional Geology

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RESEARCH TOPICS

- Deformation processes in the frontal part of subduction zones.
- Tectonic and gravitational disruption of rocks.
- Role of fluids in deformation processes.
- Seismogenic behavior of faults in subduction zones.

We are a dynamic group interested in a wide variety of research topics in geology. The research of the group was initially focused on the distinction and structural characterization of sedimentary mélanges and tectonic mélanges/broken formations cropping out in the Northern Apennines. Then, to detect the different tectonic environments where these chaotic rocks were formed and the mechanisms responsible for their generation. At present the main interest is focused on the evolution in space and time of the plate interface of convergent margins through the study of ancient analogues deformed at low temperature and the comparison with modern active margins.

The study ranges from field mapping and biostratigraphic analysis to mesostructural and microstructural analysis.

ONGOING RESEARCH PROJECT:

Along-strike variability at convergent margins: the example of the Northern Apennines and comparison with modern subduction systems .

(in PRIN Project 2010-2011: Birth and death of oceanic basins: geodynamic processes from rifting to continental collision in Mediterranean and Circum-Mediterranean orogens. P.I. Prof. G. Capponi University of Genova).

CONTACTS

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