

Lunedì 6 Maggio 2019

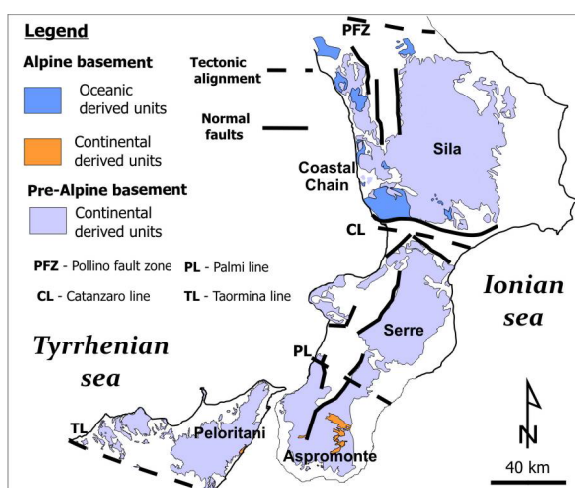
Ore 16.00 - Aula Ruffini

Dipartimento di Scienze della Terra, via Valperga Caluso 35 - Torino

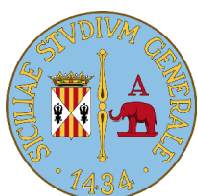
The crystalline basement rock-record of Calabrian Peloritani Orogen: a journey from microstructures to regional tectonics

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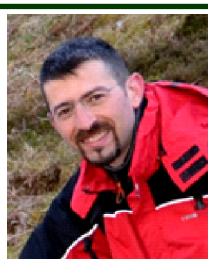


The Calabrian Peloritani Orogen (CPO) is an “exotic piece” of crystalline basement cropping out in southern Italy between the “younger” chains of Apennine to the north and Siculo-Maghrebien to the south. For this reason, for more than one century, CPO has captured the interest of many geologists from over the world, intriguing them to solve its geodynamic history within the western Mediterranean realm. A lot of detailed petrological, structural, geological, and geophysical data have been collected during last decades both on metamorphic and sedimentary rocks trying to find linkages and analogies with similar tectonic units outcropping in Sardinia, Corsica, Alps and Kabylie. CPO crystalline rock-record (related to Variscan and Alpine metamorphic/deformational episodes) is often difficult to discern in the field due to the intense Late-Alpine Orogeny (brittle reworking) and often only the study of microstructures, coupled with petrological constraints, allows the geological evolution of metamorphic complexes to be revealed. Recent petrological, structural, and geological investigations based on multidisciplinary approaches made on poly-metamorphic and poly-deformed rocks belonging to various tectono-metamorphic units of CPO allowed some open questions to be fixed. Such findings will give possibly a helpful key for the interpretation of still open questions, especially about those related to the geological boundaries between various sectors of CPO, and possibly, to understand the bigger picture, by establishing correlations with other metamorphic terranes of surrounding Mediterranean regions.



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Eugenio Fazio is a researcher at the University of Catania (Italy). His research interests mainly focus on the reconstruction of tectono-metamorphic evolution of metamorphic basements, with special emphasis on strain rate analysis of mylonites from crustal scale shear zones. His current research is aimed at quantifying microstructures (shape and lattice preferred orientation of minerals) and find relationships with petrophysical characteristics of naturally deformed metamorphic rocks.