

Short Course From rifting to drifting the mechanisms of continental lithosphere extension and rupture

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When: 18th - 22th February 2019 Where: Dipartimento di Scienze, Sezione Geologia, Università "Roma Tre" Blocco Aule - Largo San Leonardo Murialdo, 1 - Roma



The workshop will discuss different modes of extension of the continental lithosphere leading to plate rupture, using high quality offshore seismic data and onshore fossil analogue (Alps). Notably, this workshop will discuss our current understanding of rifting and breakup processes in the light of the recent IODP drilling results from the South China Sea. It will be associated with seismic exercises on rifted margins. An introduction on the influence of rift-inheritance for subsequent orogenic processes will be also presented.

Monday 18th of February, 9:30am to 12:30pm and 2pm to 3pm

- Introduction and aim of the workshop: The mechanisms of extension of the continental lithosphere and breakup.
- Formation of Magma-poor rifted margin: the case study of the Iberia-Newfoundland rifted margins.
- Seismic exercise on the Iberia margin combined with drilling results from ODP expeditions

Tuesday 19th of February, 9:30am to 12:30pm

- The Alpine Tethys a natural laboratory to study magma poor rifted margins
- The Mesozoic architecture of Alpine rifted basins from the proximal to the distal margins
- Mechanisms of extension of the continental lithosphere: From the Permian post-orogenic extension to the Jurassic rifting.

Wednesday 20th of February, 9:30am to 12pm

- The case study of the South China Sea margins, a new class of rifted margin?
- Exercise of seismic interpretation

Thursday 21th of February, 9:30am to 12pm and 2pm and 3:30pm

- Reappraisal of the magma-poor vs. magma-rich archetypes: implications for breakup processes and classifications
- Hyperextension and pre-rift salt in rift basin, the example of the Columbrets Basin.

Friday 22th of February, 9:30am to 12pm

- Importance of rift inheritance and implications for our understanding of Alpine orogeny
- Discussion and conclusions of the workshop.

For	further	details	and	registration,	contact	<u>sveva.corrado@uniroma3.it</u>	and
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