## PhD Course in

## Earth Science, Fluid Mechanics and Mathematics Interactions and Methods



## **Seminar Series 2019**

October 2nd, 2019, 16.30-17.30

Department of Mathematics and Geosciences

Aula B, Palazzina O, Via Weiss, 6

"The Origin of Continents and Oceans"

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## **Abstract**

The Earth is the only planet with oceans and continents. While surviving ocean basins are less than 200 Myr old, continental fragments as old as 3.8 Gyr can be found in several locations. This talk describes the remarkable distinctions between the processes that create oceanic versus continental lithosphere, and examines that question: "When did plate tectonics begin on Earth?". The perspective is based largely on geophysical data, but geologic, geochemical and geochronological data are also key to this fascinating tale concerning the Origin of Continents and Oceans.