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Università
di Pisa**CMG 2010****28th IUGG Conference on Mathematical Geophysics****Modelling Earth Dynamics: Complexity, Uncertainty and Validation**

7-11 June 2010, Pisa, Italy

Understanding the evolution of our planet is becoming of increasing importance. The variable dynamics of the Earth's solid and fluid components testify to the complexity of non-linear relationships governing such coupled and multiphase systems. Mathematical models are a key tool for understanding these relationships, and represent the only mean for forecasting their evolution. The goal of this meeting is to present the state-of-the-art modelling capability to represent the different dynamics of Earth's components. Theoretical models of solid-earth dynamics, such as earthquake and volcanic processes, and of atmospheric and oceanic dynamics, including climatic and biological evolutionary processes, are welcome. The focus will be on the capability of models to describe the complex evolution of Earth systems and quantify the sources of uncertainty in their dynamics, as well as to reproduce direct observations and laboratory experiments of the investigated processes.

Preliminary sessions:

- Geophysical fluid dynamics I - Volcanoes
- Geophysical fluid dynamics II - Sub-surface and surface flows
- Geophysical fluid dynamics III - Atmosphere and ocean
- Geodynamics and geomagnetism
- Brittle deformation and computational seismology
- Environmental systems and climate
- Quantifying the uncertainty in Earth systems
- Data assimilation and model validation
- Advances in analytical and computational techniques

Information:

For receiving forthcoming conference information, circulars, and notifications please send your name, affiliation, and e-mail address to cmg2010@pi.ingv.it or visit <http://cmg2010.pi.ingv.it>

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