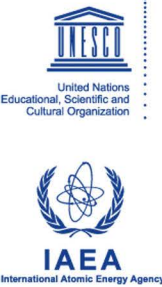




The Abdus Salam
International Centre
for Theoretical Physics
50th Anniversary 1964 - 2014



**School on Parallel Programming and Parallel Architecture for
High Performance Computing (HPC)**
27 October - 14 November, 2014

and

Developer School for HPC applications in Earth Sciences
10 November - 12 November, 2014

+

**Symposium on HPC and Data-Intensive Applications in Earth
Sciences: Challenges and Opportunities**
13 November - 14 November, 2014

(Miramare - Trieste, Italy)

The **School** has the goal of enabling participating scientists to understand modern parallel architectures and programming paradigms and provide a foundation for future computational research. Participants will go through an intensive program with focus on relevant practical skills for users of HPC resources. Lectures on selected technical aspects of modern HPC hardware will be mixed with tutorials in parallel programming tools and libraries. The hands-on sessions will cover numerical methods, parallel strategies, as well as data management and code efficiency.

Following the School, an optional one week training on "**Deploying and Operating a resource for HPC with Commodity Hardware**" is planned. Due to logistics, this training can only be offered to a limited number of participants with relevant IT and Linux skills. Preference will be given to scientists from developing countries, who can provide documented evidence of their technical involvement in the deployment and/or operation of a local HPC resource.

Concomitantly, two activities for the Earth Sciences HPC community will be held, a "**Developer School**" followed by a "**Symposium**". The first will focus on training participants in computational aspects of HPC applications for Earth Sciences: coupling of different numerical models, management and post-processing of large data sets, usage of parallel libraries for numerically intense problems. Practical sessions will be complemented by lectures dedicated to HPC related aspects of modern applications for oceanography, climatology and seismology.

The Symposium is proposed as a PRACE Advanced Training Centers (PATC) event. It is open to a general audience in the area of HPC and Data-Intensive Applications in Earth Sciences and will connect participants with experts in the field. More details on the Symposium are provided at the: <http://events.prace-ri.eu/event/datasymposium>

All Earth Sciences related events are co-sponsored by OGS (National Institute of Oceanography and Experimental Geophysics) and PRACE (Partnership for Advanced Computing in Europe).

Participation

Applicants from all countries that are members of the United Nations, UNESCO or IAEA may attend. As it will be conducted in English, participants should have an adequate working knowledge of this language. As a rule, travel and subsistence expenses of the participants should be borne by their home institutions. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants, who are nationals of, and working in, a developing country. Such support is available only to those attending at least the entire first part of the activity (October 27th to November 7th).

Applications for only the Earth Sciences part of the activity (November 10th to 14th) are accepted as well.

Thanks to the co-sponsorship of OGS, limited funding is also available for contributing to the expenses of selected participants from developed countries, with preference from Italy and the European area. Available funds will be allotted by the Directors among eligible participants requiring financial support. The co-sponsorship of PRACE will be directly allocated as a fixed contribution for participants to the Symposium only. More information will be published on the Symposium web site. **There is no registration fee.**

HOW TO APPLY FOR PARTICIPATION

The Online Application can be accessed at the activity website: <http://agenda.ictp.it/smr.php?2613>. Comprehensive instructions will guide you step-by-step on how to fill out and submit the application form.

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Developer School & Symposium**

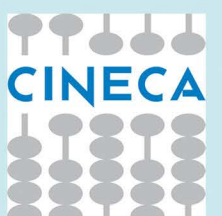
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DEADLINE
7 August 2014

Application for participating at the
Symposium only will be extended till
the end of September.