3rd Latin American Introductory School on Parallel Programming and Parallel Architecture for High Performance Computing

4 - 15 September 2023 Barranquilla, Colombia

This school has the goal of teaching participating scientists basic parallel programming paradigms and using tools for scientific computing on modern parallel architectures. Through an intensive programme combining lectures and exercises with focus on practical skills, it shall provide a foundation for future computational research using HPC. The ideal candidate is an early career scientist that either will start soon or has already started working on a research project strongly tied to large scale computer simulations and/ or large scale data analysis. Providing a referral letter from the PL supervising the project is strongly recommended.

Participants will learn fundamental techniques in parallel programming, parallel data processing, parallel machine learning and data analytics. The target is to improve the efficiency of their research workflows, and to parallelize them where possible and meaningful. Lectures are meant to provide an overview and relevant references on the presented topics, while the hands-on sessions will allow participants to practice on small example problems of general scientific interest. The programme specifically addresses the needs of scientists using, writing, or modifying modern workflows for scientific computing.

Main presented topics include foundation of modern HPC:

- Computer architectures for HPC and building of software environments
- Parallel programming tools (MPI & OpenMP)
- GPU Computing

Further information: http://indico.ictp.it/event/10206/ smr3872@ictp.it

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- HPC for Machine Learning
- Mixing of compiled and scripting languages

How to apply:

Online application: http://indico.ictp.it/event/10206/

Female scientists are encouraged to apply.

Grants:

A limited number of grants are available support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

Deadlines:

For applicants requesting financial and/or visa support

18 June 2023

For applicants coming from Institutions in Barranquilla

31 July 2023

Trieste, Ital







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