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Advanced School in High Performance and GRID Computing

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Introduction to the School.

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Advanced School in
High Performance
and GRID Computing

INTRODUCTION TO the school

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Our Goals

- To provide an overview of basics of HPC required for computational science.
- How to get the most out of (limited) computational resources.
- For those who will be facing careers in computational science to provide them with a list of what they will need to know well to be able to build or interact with a computational infrastructure.
  - to raise general awareness of IT issues amongst researchers in computational science.
  - To provide knowledge base to facilitate communication with people working in IT.

Structure of the school

- First week will focus on introductory and intermediate skills.
  - Lab exercises will be uniform among participants and provided by the staff.
  - We provide a choice of 2 lab sections one of which will be geared towards students with weaker backgrounds. The material covered will be the same but the pace will differ.
  - lectures are mandatory unless otherwise stated

Structure of the school: 2nd week

- Second week will be advanced topics:
  - Labs will be split into different areas software/hardware and work will be more individual.
  - Lectures and discussion groups are not mandatory but if you are not attending them we expect you to be in the lab.
- More information on next Monday

Survival tips

- Lectures will focus on introduction to most important IT topics for high performance computing (HPC) and GRID
- Only basics are covered: we only help you know "what you need to know".
- Best source of detailed info: the web (encyclopedia Google, wikipedia)
- Many concepts in the course are extensively applied in the lab-which is ***mandatory***.

THE WIKI : www.democritos.it/hpc-wiki

- the place where exercises and documentations are posted.
- your main tool to give feedback to us
- you are requested to report daily during the first week on the wiki.
- We will show you how to use it at the beginning of the lab this afternoon.
- Tutors will check your contribution in order to better tune exercises and lectures.

Again on WIKI: www.democritos.it/hpc-wiki

- Do you have your wiki account ? Is your password working ?
- For any problem of this kind send an email to iztok@democritos.it

First week lab:

- Beginners
  - people with little or no experience using Linux
- Intermediate
  - more experienced people
- Materials/Exercises will be the same but presented at different pace
- List of enrolled people are attached on the lab doors: please check it during breaks

More on the lists

- If you are NOT on the lists fill in the questionnaire ASAP and then contacts us (Stefano&Axel)
- If you consider our choice inappropriate (based on questionnaire) please contact us (Stefano&Axel) to discuss.
- DO NOT CHANGE LAB without informing us
- Arrangements can also be possible by the end of today..

In the lab:

- Try to use always the same computer for all the exercises and all the days.
- Strictly follow what is presented on the wiki
- If you have suggestion/improvement on the exercises tell us: we will do our best to bring them in..
- If the pace is too slow for you do not go ahead but try to help other people to keep up
- Exercises requires some written report: take your time to do this.

How to get your certificate

- Attendance is mandatory and will be followed by asking participants to sign the attendance sheet. If you need to be somewhere else please clear it with us first.
- Participants will be asked to keep a blog on the course wiki. This blog will be monitored by course staff to keep them up to date on the progress of each student.
- Lab participants: must write a brief 1-2 paragraph description of what they did on their blog. Some students will be asked to make a small presentations.
- **IF you are caught using ICTP resources for hacking purposes you will be expelled from the course without being awarded a certificate as well as other punitive measures.**

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