

# CHPC Student Cluster Competition

Your assignment is to design a small cluster to the **value of \$25,000.00** and present your design to the judging panel. In your design you must **specify hardware and software for an operational cluster and describe how it functions**. The design must be based on servers and interconnects from Dell, IBM, HP and/or Mellanox.

Apart from cost there are other considerations that you should take into account for your design, some of these are:

- Accelerators
- Application requirements
- Ease of use
- Efficiency
- Performance
- Power consumption
- Reliability

The **10 minute slide presentation** by the whole team must include your design decisions and the features of your cluster, including: cost, hardware, software, configuration and operation. **Each member of the team is required to present** even though you will be assessed as a team.

After the presentation the judging panel will have an opportunity to ask questions to each member of your team. **All members of your team can be questioned** about any part of the cluster, so make sure you are fully familiar with the design.

Along with your slide presentation you must **submit a short technical brief** on your cluster which lists the specification and cost of each of the components in the design. The brief must **provide references** to the locations where you found the prices and specifications of the hardware.

Your team leader must email the team's presentation slides and technical brief to [dmacleod@csir.co.za](mailto:dmacleod@csir.co.za) by **18:00 on Friday in PDF format**

**Presentations begin at 9:00 on Saturday** in the lecture venue. The order of the presentations will be drawn randomly.

Good Luck!

