

Computational Cluster

This cluster belongs to Prof. Patrik Henelius' research group at the department of theoretical physics, AlbaNova, KTH. The root administrator of the cluster is PhD student Mikael Twengström. We mainly use the cluster for test runs of our own implemented Monte Carlo codes in C⁺⁺.



Figure 1: The physical 2U chassi of the cluster.

Hardware

The cluster consists of 4 nodes where each node has 2 processors with 8 cores each, which gives a total of 64 cores for the whole cluster. All nodes are equally equipped and below you find a table for the hardware of a single node:

- CPU: 2xIntel Xeon E5-2630v3 8c 2.4 GHz
- RAM: 8x8 GB DDR4 2133 MHz REG ECC
- Disk: 2 TB 7200 RPM SATA
- Network: 10GbE SFP+ interconnection.
- KELVIN TWIN2-XEON D231 2U
- Intel C612 chipset
- IPMI 2.0 management
- Shared 2 kW PSU

General info

The main/login node is called termina, the other ones are named hylia2, hylia3, hylia4, (hylia1 is identical to termina). The cluster runs the Linux based operating system called CentOS.

Obtaining an account

Talk to Mikael Twengström (office A4:1065) or send an email to mikaeltw@kth.se to request an account. If you send an email; please include a preferred username and make sure that I know who you are. I will then set a random password and distribute it to you. You will then be forced to change your password upon your first login.

Getting started

Before you login for the first time you should read this document:

[Cluster user information](#)