LQCD HPC CLUSTER

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INFO

The LQCD cluster is an HPC installation in use by the lattice group at CTP.

The cluster is a baby-HPC system that provides an environment similar to national supercomputing centers.

Jobs could be up to 6 days long, and use multiple nodes.



HARDWARE

□ IO compute nodes (gx-nodes)
□ IGb Ethernet
□ each compute nodes
□ 24 cores Intel Xeon E5-2620 @ 2.00 GHz
□ I28 GiB memory
□ 4x Nvidia GTX1080Ti IIGB
□ 24 compute nodes (p-nodes)
□ I00Gb Ethernet
□ each compute node
□ 64 cores Intel Xeon 5218 @ 2.30 GHz
□ 384 GiB memory
□ 8x Nvidia GTX2080Ti IIGB



SOFTWARE

- gcc, gfortran, clang multiple versions
- CUDA
- □ Julia
- □ OpenMPI
- □ intel SDK
- □ USQCD software stack
- □ SLURM



SLURM POLICIES

- ☐ Allocation on whole-node basis only
- Multiple partitions with different time limits and QOS
- □ Multinode jobs



STATUS

- gx nodes will be soon moved to submit and generally available
- p-nodes will be soon accessible from slurm at submit nodes (at lower priority than lqcd users, so don't expect quick turnaround or large number of cycles)

