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## AuroraScience: Supercomputing for LQCD.

*Tuesday, 15 June 2010 18:00 (5 minutes)*

This poster covers in details the architecture of the application-driven AuroraScience supercomputer. This machine is a large 3D array of latest generation Intel processors, with nearest-neighbor processors connected by a network with toroidal topology. Each node has a peak (double precision) performance of 100-150 Gflops. This machine has been engineered to be reliably assembled in thousands of nodes, making it possible to deploy systems with a peak performance of several hundred Tflops. This poster complements a companion talk, presented by L. Scorzato, focusing on the use of this system as an LQCD-optimized number cruncher. Here, we focus on the structure of the machine and – in greater details – on the toroidal interconnection system.

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poster

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