Center for Computational Physics University of Tsukuba



Grid Activity for Lattice QCD Research

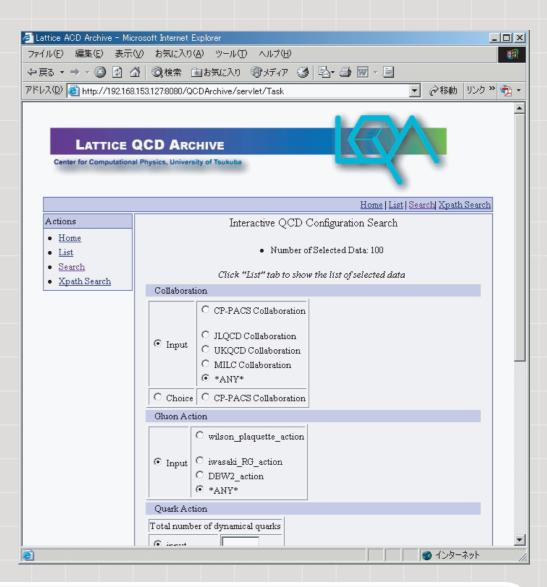
Lattice QCD Archive

About the Archive

This Archive stores gauge configurations and other data of lattice QCD, and makes them available to lattice field theory community world-wide.

Files stored

The main set of files currently in the Archive are the twoflavor full QCD configurations generated by the CP-PACS parallel computer at the Center for Computational Physics. There are four sets of files corresponding to four lattice spacings, all generated with the renormalization-group improved Iwasaki gluon action and the Wilson-clover quark action with tadpole-improved cover coefficient.



International Lattice Data Grid

This Archive forms one of the sites of the International Lattice Data Grid (ILDG). It will serve as a gateway to the other sites of ILDG in Europe and USA. The query system of the Archive is designed to eventually allow worldwide search and retrieval of configurations stored in ILDG.

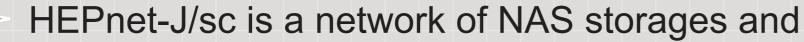
Web GUI interface for meta-database http://www.lqa.rccp.tsukuba.ac.jp/



International Lattice Data Grid

- An international collaboration to share Lattice QCD configurations generated at several sites.
- Design of standard QCD configuration XML for describing the data generated by lattice field-theory.
- To develop an international datagrid for the lattice field theory community.
- http://www.lqcd.org/ildg

HEPnet-J/sc - Japanese National Lattice QCD network -



supercomputers for lattice QCD using SuperSINET, which is a 10Gbps network backbone connecting major universities and research institutions in Japan. Since winter of 2002, mirroring of gauge configurations generated by SR8000 (1.2Tflops) at KEK and by CP-PACS (0.6Tflops) and VPP5000 (0.77Tflops) at University of Tsukuba has been operational. Mirroring will be expanded to six sites by the spring of 2004.

