

ILDG8 report from Japan

Site reports on physics plans

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High Energy Accelerator Research Organization (KEK)



Computer resources

- Tsukuba Univ.
 - PACS-CS (June 2006-) 14.3 Tflops
 - VPP 5000 0.8 TFlops
- KEK (running since March 2006)
 - Blue Gene/L 57.3 Tflops
 - SR11000 2.15 Tflops
- Osaka Univ. (not QCD dedicated, 1/4-1/6 available)
 - SX-5 1.3 Tflops -> 24+ Tflops (Jan 2007-)
- Yukawa Inst., Kyoto Univ. : SX-8 1 Tflops (Jan 2006-)
- Hiroshima Univ. : SR11000 0.7 TFlops



Data generation plan

Large scale projects

- **PACS-CS Collab. (mainly uses PACS-CS)**
 - Nf=2+1, NP improved Wilson, Iwasaki gauge
 - $a^2 = 0.015, 0.01, 0.005 \text{ fm}^2$ ($16^3 \times 32, 20^3 \times 40, 28^3 \times 56$)
 - now $m/m_s > 0.5$ --> $m/m_s = 0.2$ or less (Luscher's domain decomposed HMC)
 - will be released when (1) six months after a paper on light hadron spectrum/quark masses made public, (2) heavy quark and eta' results presented at lattice conference.



Data generation plan

Large scale projects

- **JLQCD Collab. (mainly uses BG/L at KEK)**
 - Nf=2, Iwasaki gauge + overlap quarks (topology fixed)
 - beta=2.30, a=0.12fm, $16^3 \times 32$, $m = m_s/4 - m_s$
 - will be released when papers on simulation and light hadron spectrum are published

Other collaborations in Japan (QCD-TARO, Kanazawa, Kyoto, etc.) will also be invited to JLDG.