



Contribution ID: 261

Type: not specified

## Lattice QCD with optimal domain-wall fermions: light meson spectroscopy

*Monday, 14 June 2010 15:10 (20 minutes)*

We give an overview of our simulations of 2-flavors and (2+1)-flavors QCD with optimal domain-wall fermions, using a GPU cluster with 200 Tflops(peak)/36 Tflops(sustained). We work on a lattice of size  $16^3 \times 32$ , with lattice cutoff  $a^{-1} \simeq 1.6$  GeV, and eight dynamical (sea) quark masses in the range  $m_s/8 - m_s$ , where  $m_s$  is the physical strange quark mass. The exact chiral symmetry on the lattice is preserved with  $N_s = 16$  in the fifth dimension. We present our first results of light meson masses and decay constants.

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talk

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