

Baryon Spectrum in 2+1 flavour Domain Wall QCD from QCDOC

Presenter: Chris Maynard (The University of Edinburgh)

D.J. Antonio, P.A. Boyle, C. Dawson, A. Juettner, R.D. Kenway, M. Lin, C.M. Maynard, J. Noaki, B.J. Pendleton, R.J. Tweedie, A. Yamaguchi, J.M. Zanotti. RBC and UKQCD collaborations.

Abstract: We present results for the baryon spectrum in 2+1 flavour Domain Wall QCD. The lattices used were generated with the Iwasaki gauge action and have volumes of $16^3 \times 32$ and $24^3 \times 64$ with a fifth dimension size of either 8 or 16. These lattices have u and d masses as low as one quarter of the strange quark mass. All data were generated jointly by the UKQCD and RBC collaborations on the QCDOC machines.