

Hadron spectrum with domain-wall valence quarks on an improved staggered sea.

Presenter: David Richards (Jefferson Laboratory)

R. G. Edwards, G. F. Fleming, Ph. Hagler, C. Morningstar, J. W. Negele, K. Orginos, A. V. Pochinsky, D. B. Renner, D. G. Richards, and W. Schroers, [LHPC Colaboration]

Abstract: The hadron spectrum is computed in full QCD using domain-wall valence fermions on an improved staggered sea, for pion masses down to 359 MeV. Emphasis is laid on the low-lying baryon spectrum. All possible baryon correlators obtainable from local and quasi-local quark sources are computed, using lattice group-theory methods. Results are presented for the lowest-lying states in each isospin channel.