



Contribution ID: 229

Type: not specified

Non-perturbative running of the coupling from four-flavour lattice QCD with staggered quarks

Tuesday, 15 June 2010 17:20 (20 minutes)

Using the Schroedinger functional (SF) with a single staggered fermion field we calculate the SF coupling in four-flavour QCD for a wide range of energies and lattice sizes up to $L/a = 16$. Preliminary results for the continuum extrapolation of the step-scaling function are presented. To reduce cutoff effects, one-loop $O(a)$ improvement has been implemented. Various cross checks are made possible by the use of two independent sets of lattices with either $T = L + a$ or $T = L - a$.

Please, insert your presentation type (talk, poster)

Talk

Primary author: PEREZ RUBIO, Paula (Universidad Autonoma de Madrid and Trinity College Dublin)

Co-author: Dr SINT, Stefan (Trinity College Dublin)

Presenter: PEREZ RUBIO, Paula (Universidad Autonoma de Madrid and Trinity College Dublin)

Session Classification: Parallel 32: Standard model parameters and renormalization

Track Classification: Standard model parameters and renormalization