



Contribution ID: 128

Type: Poster

Pseudo-scalar decay constants on three-flavour CLS ensembles with open boundaries

Tuesday, 26 July 2016 19:00 (1 hour)

We determine the masses and the pseudo-scalar decay constants of charmed mesons using non-perturbatively $O(a)$ improved Wilson quarks. Our analysis is based on the $N_f = 2 + 1$ ensembles using open boundary conditions, generated within the CLS effort. The status of results for 2 lattice spacings, $a \approx 0.086$ fm and $a \approx 0.064$ fm, will be presented. The pion mass is varied from 420 to 220 MeV. This is part of a continuing analysis by the RQCD and ALPHA Collaborations, aiming at a stable continuum extrapolation using several lattice spacings. To extrapolate to the physical masses, we follow both, the $(2m_l + m_s) = \text{const.}$ and $m_s = \text{const. line.}$

Primary author: Mr HOFMANN (UNIVERSITY OF REGENSBURG), Stefan (German)

Co-authors: Dr HEITGER (INSTITUT FÜR THEORETISCHE PHYSIK, WESTFÄLISCHE WILHELMS-UNIVERSITÄT MÜNSTER), Jochen (German); Mr ECKERT, Kevin (Institut für Theoretische Physik, Westfälische Wilhelms-Universität Münster); Dr COLLINS, Sara (University of Regensburg); SOELDNER, Wolfgang (Regensburg University)

Presenter: Mr HOFMANN (UNIVERSITY OF REGENSBURG), Stefan (German)

Session Classification: Poster

Track Classification: Hadron Spectroscopy and Interactions