



Contribution ID: 305

Type: **Parallel Talk**

Determination of the gradient flow scale t_0 from a Mixed Action with Wilson Twisted Mass Valence Quarks.

Tuesday, 1 August 2023 14:50 (20 minutes)

We carry out a scale setting procedure of a mixed action setup consisting of valence Wilson twisted mass fermions at maximal twist on CLS ensembles with $N_f = 2 + 1$ flavours of $O(a)$ -improved Wilson sea quarks. We determine the gradient flow scale t_0 using pion and kaon isoQCD masses and decay constants as external input. We employ model variation techniques to probe the systematic uncertainties in the extraction of the ground state signals of lattice observables, as well as for the continuum-chiral extrapolations used to compute t_0 at the physical point.

Topical area

Quark and Lepton Flavor Physics

Primary author: SAEZ-GONZALVO, Alejandro (IFT UAM-CSIC)**Co-authors:** CONIGLI, Alessandro (IFT UAM-CSIC); FRISON, Julien (DESY - Zeuthen); HERDOIZA, Gregorio (IFT, UAM-CSIC); PENA, Carlos (IFT UAM-CSIC)**Presenter:** SAEZ-GONZALVO, Alejandro (IFT UAM-CSIC)**Session Classification:** Standard Model Parameters