



Contribution ID: 483

Type: Oral presentation

## Quark-gluon vertex with 2 flavours of $O(a)$ improved Wilson fermions

*Thursday 29 July 2021 05:45 (15 minutes)*

We study the Landau-gauge quark-gluon vertex with 2 flavours of  $O(a)$  improved Wilson fermions, for several lattice spacings and quark masses. In the limit of vanishing gluon momentum, we find that all nonzero form factors have a significant infrared strength, and that the leading form factor  $\lambda_1$ , multiplying the tree-level vertex structure, is significantly enhanced in the infrared compared to the quenched case. We find that all form factors are further enhanced in the infrared as the chiral and continuum limits are approached.

**Authors:** SKULLERUD, Jon-Ivar (National University of Ireland Maynooth); OLIVEIRA, Orlando (University of Coimbra); SILVA, Paulo (University of Coimbra); STERNBECK, Andre; Dr KIZILERSU, Ayse (University of Adelaide)

**Presenter:** SKULLERUD, Jon-Ivar (National University of Ireland Maynooth)

**Session Classification:** Vacuum Structure, Confinement, and Chiral Symmetry

**Track Classification:** Vacuum Structure, Confinement, and Chiral Symmetry