Contribution ID: **1120**   Type: **Parallel session talk**

$B_s \to \mu^+\mu^-\gamma$ at large q^2 from lattice QCD

Saturday 20 July 2024 11:45 (15 minutes)

We present a first-principles lattice QCD calculation of the local form factors describing the $B_s \to \mu^+\mu^-\gamma$ decay. We focus on the region of large di-muon invariant masses $\sqrt{q^2}$ $gtrsim 4.2$ GeV, where the contributions from the four-quarks operators in the effective weak Hamiltonian (which are neglected at present) are expected to be small. We use our results for the form factors to determine the branching fraction for $B_s \to \mu^+\mu^-\gamma$, which has been recently measured by the LHCb in the region $\sqrt{q^2} > 4.9$ GeV.

Alternate track

I read the instructions above

Yes

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Session Classification: Strong interactions and Hadron Physics

Track Classification: 06. Strong Interactions and Hadron Physics