

Contribution ID: 415 Type: Talk

Bs -> mu+mu- gamma & Bs -> phi gamma decay rates from Nf=2+1+1 twisted mass simulations

Tuesday, 30 July 2024 16:15 (20 minutes)

We present our recent estimate of the $B_s \to \mu^+\mu^-\gamma$ decay rate at large q^2 , computed on four lattice spacing of $N_f=2+1+1$ twisted mass simulations. The relevant form factors are extrapolated to physical B_s meson mass from simulations carried out up to $2M_{D_s}$, covering the region of $\sqrt{q^2}>4.16\,\mathrm{GeV}$, and adopting a novel strategy to circumvent the problem of analytic continuation of electroweak amplitude. We will also present preliminary results of the $B_s \to \phi \gamma$ decay rate.

Primary author: Dr SANFILIPPO, Francesco (INFN Roma Tre)

Presenter: Dr SANFILIPPO, Francesco (INFN Roma Tre)

Session Classification: Quark and lepton flavour physics

Track Classification: Quark and Lepton Flavour Physics