



Contribution ID: 263

Type: **Talk**

## Bringing near-physical QCD+QED calculations beyond the electro-quenched approximation

*Friday, 2 August 2024 14:55 (20 minutes)*

In this talk I will present ongoing work to calculate quark-disconnected isospin-breaking corrections to leptonic meson decays at leading order on RBC-UKQCD physical-point domain-wall ensembles. We follow on from previous work at non-physical masses by making use of efficient estimators to address the computational challenges in estimating the relevant quark-disconnected subdiagrams. Efficiently estimating these diagrams at near-physical masses lowers the computational barrier for ab-initio electro-unquenched calculations of precision observables, such as hadronic mass-splittings and meson decay constants. I will present preliminary findings at a coarse lattice spacing and provide an outlook for the future.

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**Session Classification:** Quark and lepton flavour physics

**Track Classification:** Quark and Lepton Flavour Physics