

TITLE:

Beta decays and non-standard interactions in the LHC era

ABSTRACT:

The study of beta decays has historically played a central role in establishing what we now call the Standard Model of electroweak interactions. Nowadays, precision studies of semi-leptonic decays involving light quark flavors (u,d,s) can reveal signatures of non-standard interactions arising from broad classes of Standard Model extensions.

In this talk I describe the status and prospects of charged-current semileptonic decays as probes of physics beyond the Standard Model and the interplay of these low-energy probes with searches at the Large Hadron Collider.