

# CFTP & LIP LHC SEMINAR



*No âmbito das disciplinas do Programa Doutoral em Física do IST*

## The charm of New Physics at the Large Hadron Collider

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Discrepancies between theory and measurements of lower-energy quantities may reveal virtual contributions of non-standard-model particles or interactions prior to their direct observation. Historically, this indirect approach has been rewarding, especially in the quark-flavor sector. The LHCb experiment at the LHC proton-proton collider has access to the worlds largest samples of charmed meson decays. I review recent charm physics results, focusing on a few that have the potential to challenge the standard model.