Contribution ID: 83 Type: not specified

## Dark Meson Searches at the LHC

Dark matter could have its origin in a new, strongly coupled, dark sector with fermion constituents that form dark analogies to the standard model mesons, and if so, these *dark mesons* could already have been produced in the 13 TeV proton-proton collisions in the LHC Run 2.

I will present my ongoing search for Dark Mesons in LHC Run 2 data collected with the ATLAS detector, focusing both on the theoretical implications and the specific analysis strategy. Preliminary results suggest that the analysis will be sensitive to a large part of the previously un-probed parameter space of the model.

Author: SUNNEBORN GUDNADOTTIR, Olga (Uppsala University (SE))

Presenter: SUNNEBORN GUDNADOTTIR, Olga (Uppsala University (SE))

Session Classification: Plenary session

Track Classification: Posters