

QCD@LHC2022

28 November 2022 to 2 December 2022
IJCLab Orsay, France

Contribution ID: 196

Type: not specified

Four top probes of new physics

Tuesday 29 November 2022 14:40 (15 minutes)

In the Standard Model (SM) of particle physics, four-top-quark production is an extremely rare process with a cross section of approximately 12 fb. In extensions of the SM with top-philic new states, the four-top production rate can be enhanced considerably. In this contribution results will be presented of searches by the ATLAS and CMS experiments that have yielded the first evidence for the SM process, as well as stringent bounds on more exotic production mechanism of the same final state. The talk will address a review of the latest results of the SM $\bar{t}t$ searches at ATLAS and CMS. The results of the BSM $\bar{t}t$ searches at ATLAS will be discussed as well.

Declaration

I certify that I have checked that I am authorised to submit the abstract with the listed co-authors with their current affiliations

Change of Speaker

I understand that change of speaker is allowed provided that no participant gives more than one talk. Otherwise, we will ask the speaker to choose between one or the other abstract to be presented.

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Session Classification: Parallel A: WG2&8

Track Classification: WG8: QCD for BSM studies