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Supervised, unsupervised and data-derived signal regions

Wednesday 25 May 2022 19:00 (30 minutes)

ABSTRACT:

Data-driven methods are becoming increasingly popular and could give us new insights when searching for signals from new physics. On the other hand, theoretical models and supervised learning approaches should not be neglected.

In this talk we present and compare different ways of defining "signal regions" at the Large Hadron Collider that are of interest for a "goodness-of-fit" test. We compare the performance of 3 of these approaches and discuss a new way to define "signal regions".

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