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Model-independent Searches for New Physics in Multi-body Invariant Masses

Thursday, 7 October 2021 18:00 (25 minutes)

Model-independent searches for physics beyond the Standard Model typically focus on invariant masses of two objects (jets, leptons or photons). In this study we explore opportunities for similar model-agnostic searches in multi-body invariant masses. In particular, we focus on the situations when new physics can be observed in a model-independent way in three- and four-body invariant masses of jets and leptons. Such searches may have good prospects in finding new physics in the situations when two-body invariant masses, that have been extensively explored at collider experiments in the past, cannot provide sufficient signatures for experimental observations.

Is this abstract from experiment?

No

Name of experiment and experimental site

N/A

Is the speaker for that presentation defined?

Yes

Details

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Internet talk

Yes

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