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Machine learning for top physics in CMS

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Machine learning (ML) plays a significant role in the physics analyses at the CMS experiment. Many different techniques and strategies have been deployed to a wide range of applications. In this presentation we will illustrate the most advanced techniques used in top quark physics measurements, such as using ML algorithms to improve the extraction of effective field theory contributions, and to predict background shapes in the region that are hard to be covered by conventional methods. Potential future developments will be discussed too.

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