

Techniques for ML-based Model Agnostic Searches in CMS

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The possibilities of BSM particles that could be hiding the LHC data are too numerous to be covered by direct searches. Recently, new types of model agnostic searches have been proposed that can achieve significant sensitivity enhancements to a wide range of distinct signal models in a single search. These new techniques use sophisticated machine learning methods in entirely data-driven ways to reduce backgrounds by orders of magnitude. This talk will overview CMS's efforts to apply these techniques to a dijet resonance search, and demonstrate the discovery potential of this new class of search strategies.

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