

MUSiC - A Model Unspecific Search In CMS

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MUSiC is a tool for model independent searches in the data recorded by the CMS experiment. Such an analysis can help to understand the detector and later to discover new physics by systematically scanning the data for deviations from the standard model expectations. Sensitivity to a wide range of models for new physics is achieved by minimizing the theoretical bias. Kinematic distributions, expected to be sensitive to detector effects and new physics are compared, after sorting the events into classes defined by their particle content (leptons, photons, jets and missing transverse energy). Systematic uncertainties are taken into account rigorously in advanced statistical methods, which are used to determine the significance of the deviating regions. The current status of this analysis and the state and performance of the CMS experiment in light of this analysis is shown.

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