

MadAnalysis5 status & Development

Tuesday 15 May 2018 09:20 (15 minutes)

We will discuss the new functionalities of MadAnalysis v1.6, as well as recent extensions of the MadAnalysis5 Public Analysis Database for the recasting of LHC results. In particular, the new functionalities include a direct handling of signal regions definitions at the level of the normal mode of MadAnalysis5, options for dealing with event featuring both fat and normal jets and support for the LHE3 and HEPMC3 formats. Moreover, MadAnalysis can now be directly executed from within MadGraph5_aMC@NLO thanks to a new interface between the two codes. On the recasting side, we will present and discuss the implementation of new 13 TeV ATLAS and CMS analyses within the public analysis database. These analyses focus on supersymmetry, dark matter and more exotic searches. On the technical side, the recasting procedure has fully automated so that CLs numbers can be obtained straightforwardly from the event sample, and the framework has been extended to handle long-lived particles.

Presentation

Talk given in person

Author: Dr CHALONS, Guillaume (LPSC)

Presenter: Dr CHALONS, Guillaume (LPSC)

Session Classification: Methods & Tools