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Beyond the Standard Model Global Fits with GAMBIT

JONATHAN CORNELL, Weber State University

The wide range of probes of particle physics beyond the standard model (BSM) leads to the need for tools that combine experimental results to make robust statements about the validity of theories of new physics and the preferred regions of their parameter space. In this talk, I will describe the code we have built for such analyses: GAMBIT, the Global and Modular BSM Inference Tool. GAMBIT is a flexible and extensible framework for global fits of essentially any BSM theory. The code currently contains results from collider searches for new physics, cosmology, neutrino experiments, astrophysical and terrestrial dark matter searches, and precision measurements. I will give a brief introduction to the capabilities of the code and discuss some recent analyses that have been undertaken using it.