

Abstract Submitted  
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**Bypassing formal Lagrangians and modifying Les Houches files by hand**<sup>1</sup> MYRL SMITH, MATTHEW BELLIS, Siena Coll, CMS COLLABORATION  
— When an experimentalist wants to search for a new physics process at a collider the first order of business is to generate Monte Carlo events at the quark-level. Following that, the hadronization of the quarks is simulated through PYTHIA, the detector response is simulated using GEANT, and the reconstruction efficiency is estimated. While the second step can be computationally very time consuming, the bottleneck is often generating the raw events at quark-level if the physics is brand new. The tool of choice is MadGraph, which allows the user to define the rules of their Lagrangian, but an analyst has to find a theorist who will to code this up. We have used MadGraph to generate the most basic of processes and then simulated subsequent decays through a phenomenological model and then added this properly to the output Les Houches files. We present the status of this proof-of-concept approach and suggest ways that this could be used to test other models after the fact.

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