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Simulation of a high-granular hadronic calorimeter for multi-TeV physics

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The emerging technology of high-granularity calorimeters help advance the identification and reconstruction of highly-boosted particles at the TeV scale, such as tau leptons, top quarks, Higgs and W/Z bosons. The performance of high-granularity calorimetry can be studied using fast and full detector simulations. This talk describes a software setup to perform such simulations, as well as preliminary physics performance results on reconstruction of boosted W bosons and tau leptons at the TeV-scale using a full GEANT4 detector simulation.

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