**Geant4 simulations of a sampling hadronic calorimeter with dual readout for future colliders**

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Hadronic calorimeters with dual readout measure both scintillation and Cherenkov lights produced in their active media. They offer improvements in energy resolution and, therefore, have become increasingly interesting due to the need for precision jet measurements at Higgs factories. This paper presents Geant4 simulations of single-particle responses of several calorimeter types, and demonstrates the effect of inclusion of Cherenkov light in the reconstruction of energies. The simulations are performed with a single-photon precision.

**Early Career**

No

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