

Construction and testing of the sPHENIX hadronic calorimeter prototype

The planned sPHENIX experiment is a major initiative and a key part of the future of heavy ion physics in the US. One of the key pillars of the planned physics program is detailed measurements of jets, which requires hadronic calorimetry over a large solid angle. The sPHENIX hadronic calorimeter (HCal) is a sampling calorimeter comprising alternating layers of steel absorber and plastic scintillator. In this poster we discuss the design and construction of the HCal prototype tested at the Fermilab Test Beam Facility in 2016 and implications for the final design, as well as detailed results on testing and characterization of the scintillators.

Preferred Track

Future Experimental Facilities, Upgrades, and Instrumentation

Collaboration

sPHENIX

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