

Test Beam Performance of the sPHENIX EMCal Prototype

The sPHENIX detector is a proposed upgrade to the PHENIX detector at the Relativistic Heavy Ion Collider (RHIC). The sPHENIX detector will measure properties of quark gluon plasma (QGP) through the study of jets and hard probes. The electromagnetic calorimeter (EMCal) consists of tungsten powder and epoxy blocks with embedded scintillating fibers. The approximately 7 mm radiation length allows a compact calorimeter with fine segmentation. A prototype EMCal consisting of an 8 by 8 array of towers was tested at the Fermilab Test Beam Facility in April 2016. This poster will present the design and performance of the prototype EMCal and future plans.

Preferred Track

Future Experimental Facilities, Upgrades, and Instrumentation

Collaboration

sPHENIX

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