Type: Oral

Compact W-Si calorimeters for the PHENIX heavy ion experiment at RHIC

Sunday 12 March 2006 12:12 (18 minutes)

The design and expected performance of tungsten - silicon "nose cone" calorimeters for the upgrade of the Phenix experiment at BNL will be described. The calorimeters will provide precision measurements of individual electromagnetic showers, aid in gamma / pi0 / eta / hadron identification, and aid in jet finding, jet energy, and impact position measurements. Two photon separation is expected to be provided to ~ 1/4 the Moliere radius. The calorimeters will also contribute data for a fast trigger. The design of the nose cone calorimeters provides one model for support, readout, and cooling of calorimeter elements. Design features could be applicable to the larger tungsten - silicon calorimeters under consideration for the ILC.

Authors: Dr KISTENEV, Edward (Brookhaven National Laboratory); Dr COOPER, William (Fermilab)
Presenter: Dr COOPER, William (Fermilab)
Session Classification: Calorimetry and Muons

Track Classification: Calorimetry and Muons