ICHEP 2016 Chicago



38th INTERNATIONAL CONFERENCE ON HIGH ENERGY PHYSICS

AUGUST 3 - 10, 2016 CHICAGO

Contribution ID: 898

Type: Oral Presentation

test beam results on W-fiber and tilted plate calorimeters for a new RHIC experiment (12' + 3')

Thursday 4 August 2016 12:45 (15 minutes)

Achim Franz Brookhaven National Laboratory for the (s)PHENIX collaboration

Over the 16 years of data taking at the Relativistic Heavy Ion collider, RHIC at BNL it became important to identify and analyze jets in the heavy ion collisions. Comparing jets from partons traversing the hot and dense medium to ones created in vacuum sheds light on the microscopic structure of the quark gluon plasma. One important tool in jet recognition is calorimetry with electromagnetic (EM) and hadronic (HAD) sections, ladder is missing on both current RHIC experiments. The PHENIX collaboration is planning substantial upgrades to a new detector with large coverage EM and HAD calorimetry and precision charged particle tracking. Beam tests of the W-fiber EM calorimeter and tilted plate HAD calorimeter have been performed in 2014 and 2016 at the FNAL test beam facility. This talk will present results from these tests and an outlook on the new experiment.

Author: Dr FRANZ, Achim (Brookhaven National Laboratory)

Presenter: Dr FRANZ, Achim (Brookhaven National Laboratory)

Session Classification: Detector: R&D and Performance

Track Classification: Detector: R&D and Performance