

Abstract Submitted
for the HAW09 Meeting of
The American Physical Society

FOCAL: a FOrward CALorimeter for PHENIX CARLA VALE, BNL, PHENIX COLLABORATION — As RHIC enters its second decade of running, upgrades to the PHENIX experiment are in the planning and construction stages. Among them, the FOrward CALorimeter(FOCAL) aims to enhance the PHENIX acceptance on electromagnetic calorimetry, providing full 2π coverage in the forward region ($1 < |\eta| < 3$). The physics motivation centers on measurements of direct- γ , π^0 and γ -jet in p+p, d+A and A+A collisions, in order to address questions such as gluon polarisation, spin orbit correlations of quarks and the gluon density in the nuclear medium. The FOCAL is a highly segmented W-Si tracking calorimeter, consisting of 3 longitudinal sampling EM segments, with 4 layers of high-resolution Si-strip detectors for position measurements within the first segment. A prototype of this design was tested at CERN in June. Results from this test, and an overview of the FOCAL physics capabilities, will be presented.

Carla Vale
BNL

Date submitted: 07 Jul 2009

Electronic form version 1.4