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**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  $2\pi$  coverage in the forward region ( $1 < |\eta| < 3$ ). The physics motivation centers on measurements of direct- $\gamma$ ,  $\pi^0$  and  $\gamma$ -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.

- Prefer Oral Session  
 Prefer Poster Session

Carla Vale  
cmvale@bnl.gov  
BNL

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