Abstract Submitted
for the APR21 Meeting of
The American Physical Society

sPHENIX Outer Hadronic Calorimeter Assembly, Testing, and Calibration[1] DANIEL RICHFORD, CUNY Baruch/Grad Center, SPHENIX COLLABORATION[2] — The sPHENIX Detector is a new experiment at RHIC at BNL, designed to measure jets and upsilons in heavy-ion collisions, with an expected start of February 2023. The sPHENIX hadronic calorimeters are used for the measurement of jets and comprise two steel/scintillator sampling detectors inside and outside of sPHENIX's cylindrical magnet. Overall, the outer calorimeter—to be finished in spring, 2021—has acceptance of -1.1 $\leq \eta \leq$ 1.1 and 0 $\leq \phi$ ¡ 2π, and a depth of 3.8 nuclear-interaction lengths. The 32 sectors comprising the outer calorimeter are built in a factory setting, with multiple sectors simultaneously being assembled (populated with scintillator and electronics), tested (using fixed LEDs to record scintillator response), and calibrated. Each sector is calibrated with cosmic muons. This talk discusses the design, assembly, and testing of the outer hadronic calorimeter. Status of testing and calibration using cosmic rays are shown.

[1]Supported by DOE Award DE-SC0007017
[2]Please note that the authorship is "Daniel Richford for the sPHENIX Collaboration"

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Date submitted: 08 Jan 2021 Electronic form version 1.4