



Contribution ID: 893

Type: Poster

## An Event Plane Detector for sPHENIX

*Friday 8 April 2022 14:52 (4 minutes)*

The sPHENIX experiment is currently under construction and will be commissioned for data taking in 2023 at the Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory. The sPHENIX Event Plane Detector (sEPD) will be a new detector sub-system that can be installed into sPHENIX and deliver measurements of jet quenching anisotropy. The sEPD comprises two scintillator disks, one in each of the forward and backward angle regions. Each disk comprises 12 azimuthal sectors, each with 31 segments. Each segment is a scintillator tile with an optical fiber embedded to extract the light signal, which is then read out via silicon photomultipliers. As designed, the sEPD will provide precision measurements of both the event plane and the centrality of heavy-ion collisions recorded during the sPHENIX running. This poster will discuss the physics processes that can be accessed due to this detector, as well as the progress in the constructions of the detector itself.

**Author:** REED, Rosi (Lehigh University)**Presenter:** REED, Rosi (Lehigh University)**Session Classification:** Poster Session 3 T15 / T16**Track Classification:** Future facilities and new instrumentation