



Contribution ID: 536

Type: Poster

## Alignment of the sPHENIX Tracking Detectors

*Tuesday 5 September 2023 17:30 (2h 10m)*

The tracking system of the sPHENIX detector at RHIC consists of three layers of MAPS based silicon pixel detectors for precise vertex determination, two layers of silicon strip detectors for pattern recognition and beam crossing determination, a TPC for precise momentum measurement, and a partial coverage micromegas detector to assist with calibration of space charge distortions in the TPC. The physics program of sPHENIX imposes stringent requirements on the precision of both the displaced vertex measurement and the momentum resolution. Meeting those requirements demands precise alignment of the four tracking subsystems. This poster describes the alignment process for the sPHENIX tracking system. The sPHENIX detector is taking data for the first time during the 2023 RHIC run, and the status of the alignment at the time of the conference will be presented.

### Category

Experiment

### Collaboration (if applicable)

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**Session Classification:** Poster Session

**Track Classification:** Future facilities/detectors