



Contribution ID: 167

Type: **not specified**

The sPHENIX TPC

Thursday, November 21, 2024 9:10 AM (20 minutes)

The central component of the sPHENIX tracking system is the “compact” (2 meter length, 80 cm outer radius) Time Projection Chamber (TPC). This TPC operates in the continuous readout mode with a low Ion BackFlow (IBF) in a similar style to that pioneered by the ALICE TPC. In contrast to many prior TPC devices, this TPC emphasizes position and momentum resolution over the measurement of specific ionization (dE/dx) and features a number of unique design features in keeping with this priority. This presentation will give an overview of the device, summarize the struggles and eventual success of the TPC in the 2023 and 2024 running periods, and discuss the outlook for future running.

Primary author: Prof. HEMMICK, Thomas (Stony Brook University)

Presenter: Prof. HEMMICK, Thomas (Stony Brook University)

Session Classification: Plenary session

Track Classification: RDC Parallel Sessions: RDC6: Gaseous Detectors