

Abstract Submitted
for the DNP19 Meeting of
The American Physical Society

The STAR iTPC Upgrade IRAKLI CHAKABERIA, Kent State University, STAR COLLABORATION — Run-19 of the Relativistic Heavy Ion Collider marked the beginning of the Beam Energy Scan phase II (BES-II). The BES-II program has been inspired by the success of the first phase of the beam energy scan (BES-I). The goal of the BES-II is to accumulate a larger data-set to obtain experimental measurements with higher statistical precision and thus turn trends and features found during the BES-I into definitive conclusions and new understanding. With this goal in mind, STAR has undergone several substantial upgrades in preparation for the BES-II. One of the major upgrades is the installation of the new inner TPC sectors (iTPC). The iTPC brings wider pseudorapidity coverage $|\eta| < 1.5$ and increased reach to lower p_T down to 60 MeV/ c . In addition, it provides improved dE/dx and p_T resolution, and therefore better particle identification capabilities. In this talk I will report the results of the iTPC upgrade and its successful commissioning with the cosmic ray data-taking ahead of the Run-19. I will conclude by showing its status and performance during the low energy Au+Au collisions in the Run-19.

Irakli Chakaberia
Kent State University

Date submitted: 24 Jun 2019

Electronic form version 1.4