Abstract Submitted for the DNP20 Meeting of The American Physical Society

Status of the sPHENIX TPC HENRY KLEST, THOMAS HEM-MICK, KLAUS DEHMELT, PRAKHAR GARG, ROSS CORLISS, State Univ of NY - Stony Brook, SPHENIX COLLABORATION — The sPHENIX detector is being constructed at the Relativistic Heavy Ion Collider for precision study of jet, quarkonia, and heavy flavor observables. sPHENIX is scheduled to begin data taking in 2023. The central tracking detector will be a compact time projection chamber spanning from 20 cm to 78 cm in radius and pseudorapidities less than 1.1. The TPC will utilize a quadruple-gas electron multiplier (GEM) gain stage and an optimized Ne:CF4 gas mixture. The highlights, test beam results, and current construction status of the TPC will be discussed.

Henry Klest State Univ of NY - Stony Brook

Date submitted: 25 Jun 2020 Electronic form version 1.4