

Abstract Submitted
for the 4CS21 Meeting of
The American Physical Society

Characterization of Small-Pitch 3D Silicon Sensors for LHC Applications¹ ANDREW GENTRY, University of New Mexico, ATLAS COLLABORATION — Electrical characteristics of small-pitch 3D silicon sensors are being studied. These sensors may be proposed for tracking particles at the High Luminosity Large Hadron Collider. An overview of the goals and features of the ATLAS experiment at the LHC is presented and the need for tracking detectors of very high radiation hardness is motivated. 3D sensors are proposed as a possible solution to this need, and measurements of their leakage current, depletion voltage, and charge collection will be presented.

¹Characterization of Small-Pitch 3D Silicon Sensors for LHC Applications

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Date submitted: 01 Sep 2021

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