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Production of the ALICE Inner Tracking System BERENICE GARCIA, Lawrence Berkeley Natl Lab, ALICE COLLABORATION — The ALICE detector at the Large Hadron Collider (LHC) at CERN was designed to study the collisions of heavy ions and investigate the properties of the Quark-Gluon Plasma (QGP). To exploit the large increase in data expected after the LHC long shutdown, the replacement of the current ALICE Inner Tracking System (ITS) is planned. The ITS upgrade will consist of seven layers of Monolithic Active Pixel Sensors (MAPS), a new technology that greatly reduces the material budget near the interaction region. The seven layers of the ITS are split into inner (3 layers) and outer (4 layers) barrels for a total of 12.5 billion pixels. With the use of a Coordinate Measuring Machine (CMM), Lawrence Berkeley National Laboratory (LBNL) is responsible for producing the two middle layers, which sit at a radius of 194 mm and 243 mm and are approximately one meter in length. In this talk I will focus on the steps that are being taken to build and test the detectors at LBNL and the next steps to move forward for production and installation.

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