

COMMISSIONING AND FIRST PERFORMANCE RESULTS OF THE NEW ALICE UPGRADED INNER TRACKING SYSTEM

Hartmut HILLEMANNS (CERN), on behalf of the ALICE Collaboration

- ALICE is currently carrying out the final commissioning of the upgraded Inner Tracking System (ITS), a new ultralight and high-resolution silicon tracker consisting of Monolithic Active Pixel Sensors (MAPS), designed to match the requirements of the experiment in terms of material budget, readout speed and low power consumption of the sensors.
- ITS has in total 24120 ALPIDE MAPS Sensors, 12.5 Giga Pixels with 10.3
 m² Active Surface
- Installation in the ALICE experiment during 1st half of 2021 after two years of surface commissioning
- extensive commissioning (calibration, operation, characterization and optimization at all levels of the detection chain, also during the LHC pilot beam in Oct 2021) confirms the excellent detector performance in terms of performance, stability, uniformity and noise
- ITS2 Detector Control System fully operational and integrated in ALICE DCS





