

ALICE ITS upgrade for LHC Run 3: commissioning in the laboratory

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ALICE is the CERN LHC experiment optimised for the study of the strongly interacting matter produced in heavy-ion collisions and devoted to the characterisation of the quark-gluon plasma. To achieve the physics program for LHC Run 3, a major upgrade of the experimental apparatus is ongoing. A key element of the upgrade is the substitution of the Inner Tracking System (ITS) with a completely new silicon-based detector whose features will allow the reconstruction of rare physics channels, not accessible with the previous layout. The enabling technology for such a performance boost is the adoption of custom-designed CMOS MAPS as detecting elements.

In this talk, an overview of the adopted technologies and results from commissioning in laboratory as well as the status of the ongoing installation in the ALICE cavern and global commissioning will be given.

TIPP2020 abstract resubmission?

Yes, this would have been presented at TIPP2020.

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