ALICE ITS upgrade: the commissioning In 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 performance boost is the adoption of custom-designed CMOS MAPS as detecting element.

The assembly of the detector has been completed and the commissioning is ongoing in a surface laboratory at CERN. Meanwhile the preparation of the service structures for the integration in the ALICE detector proceeds. In this talk, an overview of the adopted technologies as well as the status of the detector commissioning will be given.

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