Contribution ID: **88**   Type: **not specified**

ALICE ITS: the Run1 to Run2 transition and recent operational experience

The characterization of the Quark-Gluon Plasma (QGP) produced during ultra-relativistic heavy-ion collisions is the main goal of the ALICE experiment at the CERN LHC. The ALICE Inner Tracking System (ITS) plays a key role in the study of the short-living hadrons through the primary and secondary vertex reconstruction. It consists of six cylindrical layers of silicon detectors based on three different technologies: two innermost layers of pixel detectors, two middle layers of drift detectors and two outermost layers of strip detectors. It covers the central pseudo- rapidity range of $|\eta|<0.9$ and the distance from the beam line ranges from 3.9 cm of the innermost layer to 43 cm of the outermost layer. During the Run1 data tacking the ITS has provided ALICE with tracking and charged particle identification capabilities, as well as a contribution to the definition of the Level0 trigger signal. In particular at low pT the event reconstruction relies on the ITS performance as tracks do not reach the outer tracking detectors. In this contribution, after a brief description of the features of three sub-detector systems and the respective performances during Run 1, the consolidation activities carried out during the long shutdown period (LS1) and the re-commissioning to prepare the detector for the data taking during Run 2 will be presented.

Primary author: COLELLA, Domenico (Slovak Academy of Sciences (SK))

Presenter: COLELLA, Domenico (Slovak Academy of Sciences (SK))