

Heavy Ion Physics with the ATLAS Detector at the LHC

The heavy-ion program at LHC will be pursued by three experiments including ATLAS, a multipurpose detector to study p+p collisions. A report on the potential of the ATLAS detector to uncover new physics in Pb+Pb collisions at energies thirty times larger than energy available at RHIC will be presented. Key aspects of the heavy-ion program of the ATLAS experiment, implied by measurements at RHIC, will be discussed. They include measurement capability of high-pT hadronic and electromagnetic probes, quarkonia as well as elliptic flow and other bulk phenomena. Measurements by ATLAS experiment will provide crucial information about the formation of a quark-gluon plasma at the new energy scale accessible at the LHC.

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