

Heavy Ion Physics Prospects with the ATLAS Detector at the LHC

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The next great energy frontier in Relativistic Heavy Ion Collisions is quickly approaching with the completion of the Large Hadron Collider and the ATLAS experiment is poised to make important contributions in understanding matter produced in these extreme collisions. While designed for high- p_T measurements in high-energy $p+p$ collisions, the detector is well suited to study many aspects of heavy ion collisions from bulk phenomena to high- p_T and heavy flavor physics. With its large, hermetic, and finely segmented electromagnetic and hadronic calorimeters, the ATLAS detectors excels in measurements of photons and jets, observables of great interest at the LHC. In this talk, we highlight the performance of the ATLAS detector for a broad spectrum of measurements in Pb+Pb collisions at the LHC with special emphasis on the key feature of the ATLAS physics program: jet and direct photon measurements.