

An Overview of Heavy-Ion Results from the LHC at CERN

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At extreme energy densities, hadronic matter undergoes a phase transition into a deconfined system of quarks and gluons, known as a Quark-Gluon Plasma (QGP). Such a state of matter may be formed by colliding ultra-relativistic heavy-ions together, which reproduce the high temperatures and densities thought to have existed about ten microseconds after the Big Bang. Lead ions have been accelerated and collided in the Large Hadron Collider (LHC) at CERN in order to allow experiments to study of the properties of the QGP. Data from proton-proton and proton-lead collisions, where no QGP formation is expected, have also been collected and analysed as a comparison to the lead-lead data.

A brief summary of the main results from lead-lead collisions, at the LHC, will be presented together with relevant results from proton-proton and proton-lead collisions

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