

Venerdì 28 Aprile 2017, ore 14:30, <mark>Aula F</mark> Livio Bianchi (University of Houston)

## From heavy-ion to proton collisions: small systems get stranger

Heavy-ion collisions have traditionally been exploited to study the hot and dense deconfined phase of strongly-interacting matter: the Quark Gluon Plasma (QGP). In this context, proton-proton and proton-nucleus collisions have been used to set the reference and to study initial state effects. The high energy frontier at RHIC and LHC has revived a long-standing intriguing question: is it possible to produce QGP in small systems? The chemical composition of the system created in the collision is a key tool to single-out the conditions under which a QGP onset can occur. It has been extensively studied at the LHC in three collision systems and at different energies, leading to ground-breaking results that will be presented and discussed in view of possible phenomenological interpretations.