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QCD in the Early Universe

Tuesday 29 August 2023 17:00 (15 minutes)

The wealth of theoretical and phenomenological information about Quantum Chromodynamics (QCD) at short and long distances collected so far in major collider measurements has profound implications in cosmology. We provide a brief discussion on the significant implications of the strongly coupled dynamics of quarks and gluons and the effects due to their collective motion on the physics of the early universe and in astrophysics. In particular, we speculate on the relationship between the existence of quasi-classical saturated QCD matter and the production of primordial black holes.

Contribution is based in part on the review article A. Addazi et al.: *Cosmology from Strong Interactions*, Universe 8 (2022) 9, 451, e-Print: 2204.02950 [hep-ph]

Submitted on behalf of a Collaboration?

No

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