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Sommario/riassunto

The phase structure of particle physics shows up in matter at extremely high densities and/or temperatures as they were reached in the early universe, shortly after the big bang, or in heavy-ion collisions, as they are performed nowadays in laboratory experiments. In contrast to phase transitions of condensed matter physics, the underlying fundamental theories are better known than their macroscopic manifestations in phase transitions. These theories are quantum chromodynamics for the strong interaction part and the electroweak part of the Standard Model for the electroweak interaction. It is