## Clarification of Quark and Nuclear Matters

10-4 sec after Big Bang: phase transition from quark matter (quark-gluon plasma: QGP) to ordinary matter of hadrons/nucleons

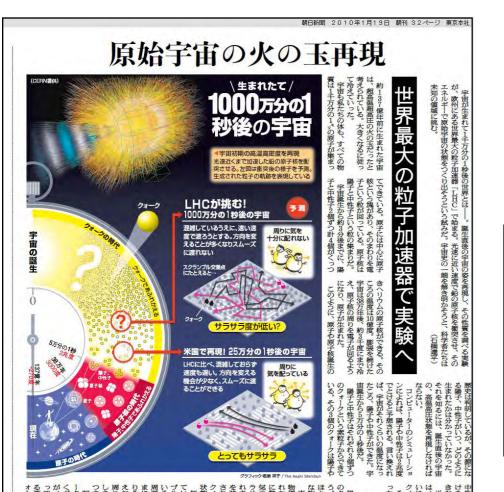
It is the most recent particle-level phase transition of our Universe.

=> Initial condition for the evolution of ordinary elements.

## \* High-energy heavy-ion collision experiments

Create QGP on the earth by mankind ("Little Bang").

=> Clarify the nature of the phase transition and the quark nuclear matters (fluctuations, expansion, transition temperature, viscosity, etc.) around the transition temperature.



The Univ. of Tsukuba is pushing forward the RHIC experiment at BNL and the ALICE experiment at CERN.

