Contribution ID: **73** Type: **Oral talk (15 min + 5 min questions)**

A modified quasiparticle model in the expansion of early universe of quark gluon plasma

Wednesday, 13 July 2022 16:00 (20 minutes)

A modified quasiparticle model approach is used in the expansion of early universe of quark gluon plasma. We also used Friedmann equation to determine the precise time evolution of the thermodynamic parameters in the early universe of quark gluon plasma (QGP). The output for time variation of the energy density and the time evolution of temperature using finite value of thermal dependent quark mass have plotted. The results show the time evolution of the early universe which also helps in the calculations of other thermodynamic variables like energy density, pressure, entropy etc. This provides deep understanding for the evolution of early universe of quark gluon plasma.

The speaker is a student or young scientist

No

Section

1. Neutrino physics and nuclear astrophysics

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Session Classification: Neutrino physics and nuclear astrophysics