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Dimuon pairs from In-In collision at $\sqrt{s_{NN}} = 17.3$ GeV at SPS energies

The invariant mass and transverse momentum spectra of lepton pairs for In-In collision at $\sqrt{s_{\rm NN}} = 17.3$ GeV have been studied. We find that the broadening of the ρ mesons spectral function due to its interaction with the thermal baryons causes substantial excess of dimuons at low mass region. Both the spectra agrees well with the experimental observations made by the NA60 collaborations. We argue that the non-monotonic variation of the slope parameter extracted from the transverse mass spectra for various invariant mass bins indicate the presence of two different phases during the evolution of the fireball.

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