

Ghostly Quarkyonic Matter at Finite Temperature

Content

We present a field-theoretical description of quarkyonic matter in which quark–nucleon duality is implemented through ghost fields that compensate the extra nucleonic degrees of freedom. The framework reduces to a nucleon effective field theory at low density and describes the dynamical formation of a nucleon shell near the Fermi surface as baryon density increases. A phenomenological equation of state for the high-density matter is proposed, and a first extension of the model to finite temperature is outlined.

Summary

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