

XXV International Baldin Seminar on High Energy Physics Problems
"Relativistic Nuclear Physics and Quantum Chromodynamics"



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Relativistic Nuclear Physics & Quantum Chromodynamics
September 18 - 23, 2023, Dubna, Russia

Contribution ID: 9

Type: **not specified**

SU(4) Phase Structure in QCD Effective Models

In SU(4) linear - sigma model, the quark-hadron phase structure is analyzed, at vanishing and finite temperatures. The masses of pseudoscalar, scalar, vector and axial-vector charmed meson states are determined and compared with the available lattice QCD hadron spectroscopy and particle data group. The mass modification of the charmed mesons in thermal medium could be predicted, from which the chiral symmetry restoration in medium could be characterized.

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Session Classification: Plenary