

FILLING UP THE FERMI SPHERE
WITH QUASIPARTICLES OF QUARKS

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S u m m a r y

The quark behavior while influenced by a strong stochastic gluon field is analyzed. An approximate procedure for calculating the effective Hamiltonian is developed. Considering quarks as the quasiparticles of a model Hamiltonian with four-fermion interaction, we study the response to the process of filling up the Fermi sphere with quarks.