

Rho Meson Properties In Medium with the Light-Front Approach

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The rho meson properties are investigated with a light-front constituent quarks model (LFCQM) in symmetric nuclear matter with the quark-meson coupling (QMC) model.

The LFCQM model, was previously applied for the vacuum, to electromagnetic form factors: charge G_0 , magnetic G_1 and quadrupole G_2 form factors where calculated; as well as the electromagnetic radius and decay constant. We predict the in-medium modifications of the rho meson electromagnetic form factors, radius, and weak decay constant in the symmetric nuclear matter.