

Hadron properties under strong magnetic fields in the NJL model

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We study the magnetic field dependence of the masses of pions, diquarks and nucleons in the context of the Nambu-Jona-Lasinio model. Eigenvalue equations associated with charged particles are obtained using the Ritus formalism. In this way we fully take into account the existence of non-vanishing Schwinger phases. Our results are compared with those available in the literature obtained using Lattice QCD and/or Chiral Perturbation Theory.

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