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Properties of magnetized neutral pions at zero and finite temperature in nonlocal chiral quark models

The behavior of π^0 meson properties in the presence of a uniform external magnetic field is studied in the context of a nonlocal extension of the Polyakov-Nambu-Jona-Lasinio model which predicts the existence of inverse magnetic catalysis at finite temperature. The analysis includes the π^0 mass, the effective π^0-quark coupling and the pion-to-vacuum hadronic form factors, both at zero and finite temperature. Numerical results are compared with previous calculations carried out within the local NJL model, when available.

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