

Charged pion masses under strong magnetic fields in the NJL model

Monday 19 March 2018 16:00 (1 hour)

The behavior of charged pion masses in the presence of a static uniform magnetic field is studied in the framework of the two-flavor NJL model, using a magnetic field-independent regularization scheme. Analytical calculations are carried out employing the Ritus eigenfunction method, which allows us to properly take into account the presence of Schwinger phases in the quark propagators.

Numerical results are obtained for definite model parameters, comparing the predictions of the model with present lattice QCD results.

Summary

Authors: GOMEZ DUMM, Daniel (IFLP, CONICET - Dpto. de Física, Fac. de Cs. Exactas, Universidad Nacional de La Plata, Argentina); COPPOLA, Máximo (CNEA, CONICET); SCOCCOLA, Norberto (CNEA, CONICET, Universidad Favaloro)

Presenter: SCOCCOLA, Norberto

Session Classification: Monday Posters