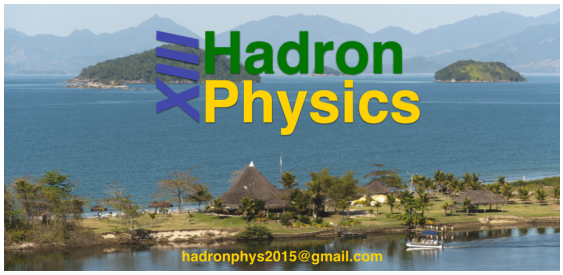

Contribution ID: **66** Type: **Poster**

Phase structure of cold magnetized color superconducting quark matter

The phase diagrams for cold color superconducting quark matter are obtained in the frame of SU(2)_f NJL model in the presence of magnetic field and chemical potential. Two sets of parameters and different values for the quark-quark and quark-antiquark couplings ratios were considered to study how the phase diagram is modified.
The regularization procedure is discussed, showing that dimensional regularization removes in a natural way the unphysical oscillations in the order parameters with respect to other regularizations types discussed in the literature.

Author: Mr ALLEN, Pablo Guillermo (CNEA - CAC)

Co-authors: Dr GRUNFELD, Ana Gabriela (CNEA); Prof. SCOCCOLA, Norberto (CNEA-CONICET); Mr ALLEN, Pablo (CNEA)

Presenter: Mr ALLEN, Pablo Guillermo (CNEA - CAC)

Track Classification: Hadronic and quark matter - applications in astrophysics