Contribution ID: **43** Type: **Invited**

Study of kaon structure in the symmetric nuclear medium within the light front approach

We investigate the properties of the charged kaon in symmetric nuclear matter by employing a Bethe-Salpeter amplitude to model the quark-antiquark bound state, which is well established by prior studies of its vacuum properties. Our analysis examines the electromagnetic form factor, charge radius, decay constant, and the light-front valence component probability. To effectively describe the constituent up and antistrange quarks in nuclear matter, we utilize the quark-meson coupling (QMC) model alongside other approaches that have proven successful in addressing various hadronic and nuclear phenomena in the nuclear medium.

Primary author: YABUSAKI, George (Universidade Cidade de São Paulo)

Co-authors: DE MELO, João Pacheco (LFTC - Universidade Cruzeiro do Sul - UNICID); Dr LOURENÇO, Odilon (ITA); Dr DE PAULA, Wayne (ITA); FREDERICO, tobias (Instituto Tecnologico de Aeronautica)

Presenter: YABUSAKI, George (Universidade Cidade de São Paulo)

Session Classification: Parallel-2