In-Mediun Pion Valence Distribuition Amplitude in a Light-Front Model

J. P. B. C de Melo[1], K. Tsushima[1], and I. Ahmed[2]

[1] **Laboratório de Física Teórica e Computacional - LFTC, Universidade Cruzeiro do Sul, 01506-000 São Paulo, Brazil**

[2] **National Center for Physics, Quaidi-i-Azam University Campus, Islambad 45320, Pakistan**

Pion valence distribuition amplitude in nuclear medium and in vacuum are calculated in a light-front constituinte quark model. The in-medium input for studying the pion properties in nuclear medium is adopted from the quark-meson coupling model. We find that the pion valence distribution amplitude, as well as the pion valence wave function, are substantially modified in nuclear medium, due to the in-medium reduction of the pion decay constant.