Effects of hyperfine dependent terms on the energy spectra of Mesons

<u>H. Hassanabadi</u>^(a), A.A. Rajabi^(a),

^(a) Sahrood university of Technology

The present work investigates the effects of spin-spin, spin-isospin and isospin-isospin interactions on the non-relativistic energy spectra of Mesons. Our study reveals that both confining and non confining terms must be taken into account in order to obtain more exact energy spectra.

[1] H. Hassanabadi, A. A. Rajabi, Few-Body Syst (2007) 41: 201210.

[2] M. M. Giannini, E. Santopinto, and A. Vassallo Eur Phys.J.A. 12, 447-452 (2001).

E-mail: h.hasanabadi@shahroodut.ac.ir