Λ*-hyper-nuclei with chiral dynamics TOSHITAKA UCHINO, TETSUO HYODO, MAKOTO OKA, Tokyo Institute of Technology — Bound states of Λ* = Λ(1405) in nuclei, the Λ*-hyper-nuclei, are studied from the viewpoint of chiral dynamics. As the Λ* is formed by a strong attraction between $\bar{K}$ and the nucleon, the Λ*-hyper-nuclei can be a main component of the $\bar{K}$ nucleon bound states. We use an extension of the Nijmegen one-boson-exchange potential for the interaction between Λ* and nucleon. The coupling constants concerning the Λ* are determined by a microscopic theory based on chiral dynamics of meson-baryon systems. We discuss the level structure of the Λ*-hyper-nuclei in the case when the Λ* is described as a superposition of two states.

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