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Λ^* -hyper-nuclei with chiral dynamics TOSHITAKA UCHINO, TETSUO HYODO, MAKOTO OKA, Tokyo Institute of Technology — Bound states of $\Lambda^* = \Lambda(1405)$ 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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