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Measurement of deep hole states in ⁴⁰Ca by 392 MeV (p,2p) reaction YUSUKE YASUDA, HARUTAKA SAKAGUCHI, SATORU TERASHIMA, SATOSHI KISHI, JUZO ZENIHIRO, Kyoto University, TETSUO NORO, TO-MOTSUGU WAKASA, HIDETOMO YOSHIDA, TAKASHI ISHIDA, SHUN ASAJI, TAKAHISA YONEMURA, YOHSUKE HAGIHARA, Kyushu University, KICHIJI HATANAKA, YASUHIRO SAKEMI, MASARU YOSOI, YOHEI SHIMIZU, KINIHIRO FUJITA, YUJI TAMESHIGE, RCNP Osaka University, HI-ROYUKI TAKEDA, RIKEN, MASATOSHI ITOH, Tohoku University, TAKAHIRO KAWABATA, CNS University of Tokyo, MAKOTO UCHIDA, Tokyo Inst. of Tech. — We performed ${}^{40}Ca(p,2p)$ experiment with 392 MeV polarized proton beam at RCNP Osaka University and measured recoil momentum distribution of cross section and analyzing power for low lying and deep hole states in ⁴⁰Ca. The aim of this experiment is to obtain information on the spectroscopic factor and the width of the deep orbital states such as the $1s_{1/2}$ state of medium nuclei for understanding the nuclear structure and correlations in deep hole states. We analyzed deep hole states with L decomposition analysis method which disentangle the contributions of each orbital states from separation energy spectra. We will report the result of ⁴⁰Ca measurements.

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