

Abstract Submitted
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Reaction cross sections of ^{14}B and ^8He on proton targets for the separation of proton and neutron density distributions MASAOMI TANAKA, MITUNORI FUKUDA, Dept. of Physics, Osaka Univ., DAIKI NISHIMURA, Dept. of Physics, Tokyo Univ. of Science, SHINJI SUZUKI, National Institute of Radiological Science, MAYA TAKECHI, Dept. of Physics, Niigata Univ., MOTOTSUGU MIHARA, KENSAKU MATSUTA, JUNNACHI OONO, SHINTARO YAMAOKA, Dept. of Physics, Osaka Univ., TAKASHI OHTSUBO, TAKUJI IZUMIKAWA, MASAYUKI NAGASHIMA, Dept. of Physics, Niigata Univ., TAKESHI SUZUKI, TAKAYUKI YAMAGUCHI, Dept. of Physics, Saitama Univ., ATSUSHI KITAGAWA, SHIGEKAZU FUKUDA, SHINJI SATO, National Institute of Radiological Science, HIMAC H093 COLLABORATION — In order to discuss the exotic surface structures of neutron- / proton-rich nuclei such as halo and skin in detail, it is important to clarify the distributions of neutron and proton respectively. For this purpose, we utilize the isospin (p-p or p-n) asymmetry of nucleon-nucleon total cross sections in the intermediate energy region. We employed a Proton target as the isospin asymmetric target, which is the most asymmetric one. Also, we employed Be, C, and Al targets which are isospin symmetric to be contrast with Proton target. In the present work, we have measured reaction cross sections for ^{14}B and ^8He on Proton, Be, C, and Al targets at intermediate energies. The experiments were carried out at the HIMAC heavy ion synchrotron facility, Japan. We will report results of the analyses.

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