

Abstract Submitted
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Neutron density distributions of $^{204,206,208}\text{Pb}$ observed via polarized proton elastic scattering JUZO ZENIHIRO, HARUTAKA SAKAGUCHI, MASARU YOSOI, YUSUKE YASUDA, Research Center for Nuclear Physics, Osaka University, SATORU TERASHIMA, GSI, TETSUYA MURAKAMI, SATOSHI KISHI, Department of Physics, Kyoto University, MASATOSHI ITOH, HIDETOMO YOSHIDA, Cyclotron and Radioisotope Center, Tohoku University, MAKOTO UCHIDA, Tokyo Institute of Technology, HIROYUKI TAKEDA, YOHEI NAKATSUGAWA, RIKEN — Cross sections and analyzing powers of polarized proton elastic scattering from $^{204,206,208}\text{Pb}$ at $E_p = 295$ MeV have been measured with the high-resolution magnetic spectrometer “Grand Raiden” at RCNP. For the data analysis, special cares for trigger efficiencies, charge collections of Faraday Cups, and so on, have been paid to deduce absolute values of the cross sections in the measurement and data reduction. We have used relativistic impulse approximation (RIA) with medium-modified nucleon-nucleon interaction and realistic point proton density distributions unfolded from charge distributions obtained by electron scattering data. We will show preliminary results of the deduced neutron density distributions of $^{204,206,208}\text{Pb}$ and their error envelopes.

Juzo Zenihiro
Research Center for Nuclear Physics, Osaka University

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