

Abstract Submitted
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Study of spin dipole strength in ^{12}N via complete polarization transfer measurements MASANORI DOZONO, TOMOTSUGU WAKASA, TETSUO NORO, KENSHI SAGARA, YUKIKO YAMADA, SHO KUROITA, TAKUMI IMAMURA, HIROKI SHIMODA, TAKEHIRO SUETA, YOSHIHIDE MATSUDA, YUICHIRO EGUCHI, KEISUKE YASHIMA, Kyushu University, KICHIJI HATANAKA, HIROYUKI OKAMURA, ATSUSHI TAMII, HIROAKI MATSUBARA, DAIKI ISHIKAWA, RCNP, YASUHIRO SAKEMI, TETSUYA NAGANO, TOSHIYA TAKAHASHI, CYRIC — Spin-isospin excitations in nuclei have been studied intensively in the past decades. While Gamow-Teller ($\Delta S = 1, \Delta T = 1, \Delta L = 0$) excitations have been investigated exhaustively, the understanding of spin dipole (SD) ($\Delta S = 1, \Delta T = 1, \Delta L = 1$) excitations is still rather limited with respect to the three different spin-parity states of $J^\pi = 0^-, 1^-, 2^-$. The strength distribution of each SD state gives us fundamental information on the tensor correlations. In order to deduce the SD strength distributions in ^{12}N , we have measured cross sections and complete sets of polarization transfer observables for $^{12}\text{C}(\vec{p}, \vec{n})$ reaction. The measured polarization transfer observables are used to separate cross section into spin-longitudinal ID_q and spin-transverse ID_p polarized cross sections. These polarized cross sections enable us to separate the SD components into each J^π . In this talk, we will report on the obtained SD strength distributions.

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