

Effect of Conversion Process ($\Xi^-P \rightarrow \Lambda\Lambda$) in Ξ^- -Hypernuclei

TAN Yu-Hong,¹ LUO Yan-An,^{2,3} and NING Ping-Zhi^{2,3}

¹ Theoretical Physics Division, Nankai Institute of Mathematics, Nankai University, Tianjin 300071, China

² Department of Physics, Nankai University, Tianjin 300071, China

³ Institute of Theoretical Physics, Academia Sinica, Beijing 100080, China

(Received: 2002-11-5; Revised: 2003-1-27)

Abstract: Effect of conversion process ($\Xi^-P \rightarrow \Lambda\Lambda$) on Ξ^- -hypernucleus is studied for $^{12}\text{Be}_{\Xi^-}$. It is found that the conversion process has a certain extent effect on properties of low-lying states of the Ξ^- -hypernuclei.

PACS: 21.80.+a, 21.10.-K, 21.60.Cs

Key words: Ξ^- -hypernuclei, conversion process, shell model

[\[Full text: PDF\]](#)

Close