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The Bound ground states of the Hypernucei with single Lambda particle

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Abstract content
 (Max 300 words)

We used the Jost function theory and the program developed for the FORTRAN environment to solve the first-order coupled differential equations equivalent to the corresponding two-body Lambda-core nucleus radial Shrodinger equation to locate the Bound States of the Lambda-Hypernuclei on the ground s states. The system of linear first-order differential equations enabled us to perform direct calculations of our physical interest such as Bound states and Resonance states. In this paper we located only the Bound states. The interaction of the Lambda hyperon with core-nucleus was described by Woods-Saxon potential. The geometric parameters of the potential varied were from the Ref [1] in order to reproduce the binding energies on that paper. We located the Bound states (binding energies) and compared with other literature. The results obtained correspond well.

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