

## A Skyrme force for all known $\Xi^-$ – hypernuclei

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Recent experimental results for the cascade hypernucleus  $^{15}_{\Xi}\text{C}$  ( $^{14}\text{N}+\Xi^-$ ) are analyzed together with data for  $^{12}_{\Xi}\text{Be}$  and  $^{13}_{\Xi}\text{B}$  within a Skyrme-Hartree-Fock theoretical approach. Optimal Skyrme parameters are determined for a consistent description of the KISO, IBUKI, KINKA, BNL-E885, BNL-E906, KEK-E224, and KEK-E176 data regarding these nuclei. The important role of deformation for  $^{13}_{\Xi}\text{B}$  is pointed out. The shape of the  $\Xi^-$  mean field in  $^{12}_{\Xi}\text{Be}$  is analyzed in some detail.

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