Deformations of sd-shell Lambda hypernuclei with antisymmetrized molecular dynamics

Abstract

In this talk, we will discuss deformations of sd-shell Lambda hypernuclei within the framework of the antisymmetrized molecular dynamics (AMD). It is one of the important subjects to reveal the responses of the core nuclei by the addition of a Lambda particle. As for the response, we focus on the difference of the Lambda separation energy between the ground and superdeformed states in $A \sim 40$ hypernuclei. Furthermore, in Mg hypernuclei, we will discuss triaxial deformation of hypernuclei and how to identify it by using a Lambda particle.