

Cluster formation around the neutron drip-line

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The formation of clusters in finite and infinite nuclear systems is an issue of great interest in nuclear physics. Recently, experiments have revealed a negative correlation between alpha-cluster formation and neutron number in Sn isotopes, showing a trend opposite to that theoretically conjectured for Be and B isotopes. Here, we investigate the cluster formation in Be and B isotopes to elucidate the clustering near the neutron drip line. The results indicate that the excess neutrons contribute to the formation of ^6He and ^8He clusters as well as alpha clusters.

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