

## Shape coexistence and shape/phase transitions in even-even nuclei

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### Abstract

Shape coexistence is known to occur in various regions of the nuclear chart, forming islands [1,2]. Shape/phase transitions have also been observed in certain regions of the nuclear chart. The interrelation between these two concepts is considered in the regions with  $(Z \approx 60, N \approx 90)$ ,  $(Z \approx 40, N \approx 60)$ , and  $(Z \approx 34, N \approx 40)$ , in which shape coexistence due to proton-induced neutron particle-hole excitations [3, 4] is related to a first-order shape/phase transition from spherical to deformed shapes [5].

### References

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