

## Nuclear reactions and astrophysical s-process

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Astrophysical s-process is among the principal processes which are responsible for creation of heavy elements beyond the iron peak nuclei. Radiative neutron capture reactions in the vicinity of nuclear shell closures are important to understand the abundance of various heavy elements. Semi-microscopic calculation has been carried out in isotopes near magic numbers for neutron capture reactions. Results of some of these calculations will be presented and their implications for elemental abundance will be discussed.

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