

## Stability of the lightest neutron rich nuclei

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Exploring and understanding the structure of the neutron-rich nuclei is a primary goal of present day nuclear physics: this activity is due to the advent of the RIBF and driven by the interest to understand better the interaction between the neutrons and the dynamics of neutron-proton unbalanced unstable nuclei.

In this presentation I will make an overview of our recent studies on exotic neutron-rich nuclei at the verge or beyond the stability. The possible existence of narrow resonant tetraneutron ( $4n$ ) states will be discussed as well as possible existence of resonant states in neutron rich hydrogen isotopes.