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## Clustering and collectivity in the nuclear many-body dynamics

In this presentation we discuss the emergence of clustering degrees of freedom in the nuclear many-body dynamics. We concentrate on alpha clustering broadly defined here as four-nucleon correlations that are of interest both as in-medium correlations and as real alphas seen in reactions.

Using configuration interaction approach and center-of-mass boosting technique we explore realistic and model hamiltonians assessing appearance and prevalence of clustering correlations, their collectivity and potential for bosonic enhancements in  $N=Z$  nuclei.

Interplay of these correlations with other dynamical features such as single-particle motion, pairing, collective rotations and particle decay are to be discussed.

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