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## Exploration of Nuclear Clustering via Compound Decay Pathways

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In recent years, experimental efforts have been dedicated to exploring the extent of clustering in excited nuclei. Of these, a particular emphasis in  $\alpha$ -clustering has been fostered due to its various influences, such as those in astrophysical processes. A series of measurements of every  $\alpha$ -conjugate nucleus in the mass range  $16 \leq A \leq 36$  impinged on  $^{12}\text{C}$  at 35 MeV/u was recently conducted with the Forward Array Using Silicon Technology (FAUST) at the Texas A&M University Cyclotron Institute with the intent of exploring decay pathways of various nuclei produced through charged particle emission.

FAUST possesses excellent position resolution and therefore angular resolution. In this talk I will present preliminary results of multi-particle correlations probing resonant states and decay pathways.

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