DNP19-2019-000044

Abstract for an Invited Paper
for the DNP19 Meeting of
the American Physical Society

^{11}O and other invariant mass results at, beyond or isobarically anchored to the proton drip line[1]

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The reconstruction of the continuum of light nuclei using the invariant mass technique has allowed us to: observe new isotopes, find many new excited states, improve level properties of known levels, find the only case of sequential 2p-2p decay, discover 2p decay between isobaric analog states, study the decay of the Hoyle state, find an unappreciated mechanism for the generation of extreme nuclear spin alignments, complete or reduce uncertainties of several isospin multiplets, and find new cases of near-threshold resonances. Our work impacts every isobar from A=5 to A = 18. This talk will have very brief discussions of how these experiments are done, a survey of some of the results mentioned above and then focus on the recent discovery of ^{11}O (the mirror of the iconic ^{11}Li) and explaining near-threshold resonances in ^{9}Li and ^{10}Be. In these cases continuum cognizant shell models are exploited to shed light on the not-so-obvious entanglement of the continuum (or continua) with structure.

[1]Work supported by: US Department of Energy, Division of Nuclear Physics.