

Abstract Submitted
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The β -decay of ^{31}Ne ¹ PETER BENDER, University of Massachusetts, Lowell — The neutron-rich Na isotopes approaching N=20 reside along the southern boundary of the Island of Inversion. These isotopes are of particular interest to nuclear structure, where observed details in the structure could lead to a deeper understand lying force which causes deformation in this mass region. Recently, the β -decay of ^{31}Ne has been studied, promising to add need structure detail to a region of the chart which had only been accessed using fast in-beam methods. Using the CCF at the NSCL, a ^{48}Ca beam was fragmented, the fast ^{31}Ne isotopes were subsequently selected using the A1900 and implanted in the BCS, allowing event-by-event particle identification to be made. Excited states in the daughter $^{31,30}\text{Na}$ isotopes are identified by emitted γ -rays collected with 16 Clover-style HPGe and 15 LaBr₃ detectors surrounding the implant detector in a rhombicuboctahedron geometry and correlated to decay events. The ongoing analysis will be discussed, and preliminary results will be presented.

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