

Abstract Submitted
for the DNP13 Meeting of
The American Physical Society

Energy Levels of Na Isotopes in and Around the Island of Inversion SCOTT SAENZ, KATHRIN WIMMER, Central Michigan University — More than 35 years after its discovery, the “Island of Inversion” continues to be of great interest for the nuclear physics community. Determining the level scheme for radioactive isotopes in and around the “Island of Inversion” can lead to a better understanding of the structure of these exotic nuclei. Sodium isotopes $^{27}\text{Na} - ^{30}\text{Na}$ were chosen due to their enclosure or proximity to the “Island of Inversion.” The experiment was conducted at the NSCL in the spring of 2013 and utilized an array of seven GRETINA detectors in conjunction with the S800 spectrograph. The high resolution and efficiency of the GRETINA array allowed for detection of previously unknown lower energy levels. Preliminary analysis of the in-beam γ -residue, γ - γ residual coincidences and the resultant level scheme will be presented at the conference.

Scott Saenz
Central Michigan University

Date submitted: 01 Jul 2013

Electronic form version 1.4