
High-spin states in $^{85}$Y were populated with the reaction $^{58}$Ni($^{31}$P,$4p$) using a 134MeV $^{31}$P beam at LBNL. Gamma rays from the reaction were detected with Gammasphere, evaporated $\alpha$ particles and protons were detected with Microball. Absorbers on BGO crystals were removed to obtain total decay energies for each event, allowing selection of higher spin events. The level scheme has been extended and a superdeformed band has been tentatively identified. Results will be compared to cranked Woods-Saxon-Strutinsky shell model calculations with self-consistent pairing.

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