Identification of $\mu$s isomers in the $^{100}\text{Sn}$ region

ANA BECERRIL, MATHEW AMTHOR, THOMAS BAUMANN, DANIEL BAZIN, JILL BERRYMAN, HEATHER CRAWFORD, ALFREDO ESTRADE, ALEXANDRA GADE, THOMAS GINTER, CAROL GUESS, MARC HAUSMANN, MILAN MATOS, GIUSEPPE LORUSSO, PAUL MANTICA, RHIANNON MEHARMHAND, KEI MINAMISONO, FERNANDO MONTES, GEORGE PERDIKAKIS, JORGE PEREIRA, MAURICIO PORTILLO, HENDRIK SCHATZ, KARL SMITH, JOSHUA STOKER, ANDREAS STOLZ, REMCO ZEGERS, National Superconducting Cyclotron Laboratory — New $\mu$s isomeric states have been identified in proton-rich nuclei in the vicinity of the doubly-magic nucleus $^{100}\text{Sn}$. The nuclei of interest were produced and studied at NSCL by fragmentation of a 120 MeV/u $^{112}\text{Sn}$ primary beam on a $^9\text{Be}$ target and selected with the A1900 Fragment Separator in conjunction with the Radio Frequency Fragment Separator system. The ions were implanted into the NSCL Beta Counting System and were correlated with their subsequent decays on an event-by-event basis. Prompt and $\beta$-delayed $\gamma$ rays were identified with the Segmented Germanium Array. Experimental details and preliminary results will be presented. Comparison to shell model predictions will also be discussed.

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