

Abstract Submitted
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Investigation of α -resonances in ^{10}Be using $^6\text{He}(\alpha, \alpha)^6\text{He}$ ANTHONY KUCHERA, G.V. ROGACHEV, Florida State University, J.C. BLACKMON, Louisiana State University, I. WIEDENHOEVER, L.T. BABY, J.A. BELARGE, E.D. JOHNSON, E. KOSHCHIY, Florida State University, J. LAI, L.E. LINHARDT, K. MACON, M. MATOS, Louisiana State University, D. SANTIAGO-GONZALEZ, Florida State University — Numerous theoretical and experimental studies have shown the importance of clustering in light nuclei [1]. The Be isotopes have been of particular interest recently due to their exotic two-core $\alpha + \alpha +$ valence neutrons configurations [2,3,4,5]. Experimentally, (α, α) reactions are prime tools for studying these structures. In this work, the $^6\text{He} + \alpha$ excitation function in the range of 10 to 18.5 MeV was measured. The ^6He beam was produced with the RESOLUT radioactive beam facility at FSU. Measurements were performed using the active target detector ANASEN [6]. Parameters of the observed states were determined by an R-Matrix analysis. The properties of these resonances in ^{10}Be will be discussed.

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