

LEVEL STRUCTURE OF DOUBLY ODD ^{154}Ho

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^{154}Ho was studied via $^{141}\text{Pr}(^{16}\text{O},3n)$ reaction at beam energy of 75 MeV. We found two new rotationally aligned bands made of neutron $h_{9/2}$ and $f_{7/2}$ orbitals coupled to a proton $h_{11/2}$ orbital. As with several new high-spin states, up to $I=20$, the ground state band with odd parity starts to show anomalous signature splitting at $I=13$ in this doubly odd ^{154}Ho . The observed rotational bands in ^{154}Ho are quite consistent with the onset of collectivity which appears in general at neutron number of 87 in neutron-deficient rare-earth nuclei.