

ABOUT EXCITATION SPECTRUM OF ${}^6\text{He}$ BELOW THE ENERGY THRESHOLD OF DECAY INTO $t + t$

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Due to measurements and analysis as inclusive proton spectra from the ${}^3\text{H}(\alpha, p){}^6\text{He}$ reaction ($E_\alpha = 27.2$ MeV) and two-dimensional spectra of p - α coincidences from the four-body ${}^3\text{H}(\alpha, p\alpha)nn$ reaction ($E_\alpha = 27.2$ MeV and $E_\alpha = 67.2$ MeV) was observed the second excited state of ${}^6\text{He}$ at energy excitation near 3 MeV.

Keywords: neutron enriched nuclei, inclusive proton spectrum, statistical decay, four-body nuclear reaction, unbound excited level, three-body resonance.