

CORRELATION STUDY OF ${}^7\text{He}$ SPECTRUM FROM ${}^2\text{H}({}^6\text{He},p)$ REACTION

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Low energy excitation spectrum of ${}^7\text{He}$ populated in one neutron transfer ${}^2\text{H}({}^6\text{He},p)$ reaction was measured with the ${}^6\text{He}$ beam at the new ACCULINNA-2 facility (FLNR JINR). Coincidences of proton, ${}^6\text{He}$ and neutron were analyzed. Due to complete kinematics conditions there are at least two ways to reconstruct low energy spectrum of ${}^7\text{He}$ from experimental observables. The missing mass spectrum is calculated from the momenta of incoming beam and outgoing proton, whereas the invariant mass spectrum takes the neutron and outgoing ${}^6\text{He}$ momenta only. Both methods have been used for low energy excitation spectrum of ${}^7\text{He}$. The results are presented and discussed.