

Structure of ^{10}Li in one-neutron transfer reaction $^2\text{H}(^9\text{Li},\text{p})$

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Beside of the general interest to structure of the light exotic nuclei ^{10}Li attracts attention of theoreticians as well as experimentalists because this nucleus is a binary subsystem of famous halo-nuclei ^{11}Li . Last time many experiments were devoted to study the structure of low energy spectrum of ^{10}Li but to the moment the status is far from consensus, even the spin-parity of the ground state is still an open question. We perform the experiment aimed to study the low energy spectrum of the ^{10}Li populated in one-neutron transfer reaction $^2\text{H}(^9\text{Li},\text{p})$ at 28 MeV/nucleon beam energy. That is one of the first experiments at new fragment separator ACCULINNA-2. The data analysis is in progress and here we present the preliminary results clarifying the structure of ^{10}Li low energy spectrum.

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