

YDA C++ PROGRAM PACKAGE FOR OPERATING WITH A NEW ANALOG SPECTROMETER OF THE DUBNA GAS-FILLED RECOIL SEPARATOR#2 INSTALLED AT MAIN FLNR DC-280 CYCLOTRON IN HEAVY ION INDUCED NUCLEAR REACTIONS

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YDA (Yury&Dastan) Builder C++ PC based code has been developed. It allow to provide a data acquisition using 48x128 DSSSD(Double Side Silicon Strip Detector) detector and multi - wire pentane filled low pressure gaseous detector [1]. Main specific of the developed program package is to use flexible real-time algorithms to provide in-fact background free conditions for ultra-rare alpha decays registration [2,3]. Three scenarios of these algorithms are under consideration. Two of them deal with the relatively low rate of beam stops, whereas the third one corresponds to high beam stop rate. First results of application of YDA code are presented too. Electronics modules, operating together with YDA code are considered in brief too as well as the programs to visualize the experimental data [4]. Programs to test electronics modules are also under consideration.

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