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A possibility to register associated pair production of hadrons and light nuclei in a kinematically forbidden region in AA-interactions on the FODS double arm spectrometer at the U-70 accelerator complex (The Monte Carlo simulation)

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The possibility to register the associated pair production of hadrons and light nuclei in a kinematically forbidden region in AA-interactions on the FODS double arm spectrometer at the U-70 accelerator complex (Protvino) is analyzed. The value of ion beam energy is 20.5 GeV/nucleon ($\sqrt{s_{NN}}$=6.3 GeV). The mode of measurements with one arm makes it possible to study production of hadrons and nuclei in forward direction at zero angle for values of Feynman variable reaching x=2.5. Here we analyze a variant with activationof both arms. The arms are installed asymmetrically at angles of 128.9 mrad and -268.9 mrad relatively to propagation of the ion beam for South and North arms respectively. This gives ability to register processes with emission of the secondary nucleons and nuclei into forward and backward hemispheres in the center of mass. The purpose of such an experiment is to explicitly reveal the cases of binary interactions, showing the cluster structure of nucleus.
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