



Contribution ID : 81

Type : Oral talk

Search for Dibaryons with small energy excitation on SPD detector in NICA collider - accuracies and counting rates

Wednesday, 23 October 2024 17:35 (15)

It is proposed to do a search for the light dibaryons in the experiment with the future SPD detector on the NICA collider at JINR . It is proposed that the reaction $d + d \rightarrow d + X$ should be measured at the collider momentum 2.6 GeV /c with the registration of the deuteron and proton in a final state. The achievable accuracies are estimated in different configurations of the detector with allowance to its gradual modifications up to completion. The counting rate of the reaction is estimated at $\approx 2 \text{ s}^{-1}$ and the accuracy of mass measurement in the first version of the detector at $\approx 4.7 \text{ MeV}$

Primary author(s) : GRIDIN, Andrei (JINR); IVANOV, Artem (JINR); KURBATOV, Vladimir (JINR)

Presenter(s) : KURBATOV, Vladimir (JINR)

Session Classification : HEP Experiment

Track Classification : High energy physics: experiment