

Abstract Submitted
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Effect of nuclear transparency from the $(p,2p)$ measurements on ${}^6\text{Li}$ and ${}^{12}\text{C}$ at 1 GeV. VITALY BATURIN, Old Dominion University, EUGENY KOMAROV, VLADIMIR NELYUBIN, VALENTINE SULIMOV, VLADIMIR VIKHROV, Petersburg Nuclear Physics Institute, Russia — We studied the production of protons to the backward direction in $(p,2p)$ reactions on ${}^6\text{Li}$ and ${}^{12}\text{C}$, accompanied by a proton emitted into the forward hemisphere. The momenta of the final two protons were measured in a wide range with the two-arm time-of-flight spectrometer. For each event we reconstructed the mass of the intermediate off-shell particles. We have discovered a strong narrow dip in the mass spectra of intermediate mesons at the mass of the real pion. We explain this effect as an abrupt decrease of the absorption probability for on-shell mesons (the pion–nuclear transparency).

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