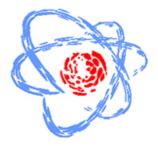
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## Resonance-like coherent production of a pion pair in the reaction pd $\rightarrow$ pd $\pi\pi$ in the GeV region

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Recently, after the discovery of the d\*(2380) two-baryon resonance(D03), a candidate for the true dibaryon, it has been found that the puzzling ABC effect is associated with its excitation. Therefore this phenomenon has attracted a particular attention.

Here we present the observation of the ABC effect and D03 excitation in

pd $\rightarrow$ pd $\pi\pi$  reaction via meson exchange in coherent kinematics.

An experimental study of the double pion production at the 0.8–2.0 GeV proton energies in the process  $p+d\rightarrow p+d+(\pi\pi)0$  has been performed.

A distribution of the events over the  $d\pi\pi$  invariant mass revealed a clear peak at the 2.36 GeV/c2 mass with 104 MeV/c2 width. The parameters of the peak are close to those observed earlier WASA experiment at CELSIUS COSY, taking into account its possible broadening due to the meson exchange and the I = 1 contamination in the ( $\pi\pi$ )0 pairs.

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