

**TWO-PARTICLE BREAK-UP OF TRITON
BY INCIDENT DEUTERON WITH ENERGY OF 37 MeV**

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The break-up reaction $D+T \rightarrow d+d+n$ is investigated at the energy of incident deuterons of 36,9 MeV. Inclusive energy spectra as well as angular distributions of deuterons are measured. We described the results of the experiment satisfactorily in the framework of the microscopic diffraction nuclear model taking into account the interaction in the final state. Our calculations have shown that the main process leading to appearance of deuterons in the output channel of $D+T \rightarrow d+d+n$ reaction is diffractive break-up of the triton by the incident deuteron, and the scattered deuterons give major contribution to the cross section. The contribution of the processes involving the formation of the intermediate resonances is quite small.

Keywords: break-up, triton, deuteron, diffractive approximation, experiment, cross section, inclusive process.