STATUS OF THE dd-GAMMA EXPERIMENT

D.L. Demin, V.V. Filchenkov, N.N. Grafov, K.I. Gritsaj, A.D. Konin, S.V. Medved', A.I. Rudenko, V.P. Vol'nykh Joint Institute for Nuclear Research, Dubna, 141980, Russia

The task understanding and the state of art of the experimental study of rare reaction $d + d \rightarrow {}^{4}\text{He} + \gamma + 23.8 \ MeV$ in $dd\mu$ molecule are presented. The experiment in the discussion is the one allowing the measurement of the reaction yield from a *p*-wave relative motion of deuterons in a molecule $dd\mu$. The results of the experiment are of great importance in verifying modern models of few-nucleon systems.