## Application of GEANT4 toolkit in dd-gamma experiment in Dubna

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An experience of simulation of physical processes using GEANT4 software is presented. It is applied for investigation of the radiative capture reactions stimulated by the muon catalysis using gamma-detectors. The experiment is carried out in DLNP JINR.

The studied problem is a rare process of the radiative capture of deuterons in muonic molecule  $dd\mu$ :

$$d + d \rightarrow^4 \mathrm{He} + \gamma$$
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