

## 400/n C-12 Fragmentation test

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**Short description:** The test calculates the fragmentation yield, angular and kinetic energy distribution of light fragments produced by a mono-energetic 400 MeV/nucl C-12 beam, in a thick water target.

**Reference publication:** D. Bolst et al, 2017, Validation of Geant4 fragmentation for Heavy Ion Therapy, *NIM A*, vol. 869, pp. 68-75.

**Geant-val layout:** C12Frag

**Reference data:** Haettner et al, Phys Med Biol. 2013 Dec 7;58(23):8265-79. doi: 10.1088/0031-9155/58/23/8265. Epub 2013 Nov 11

### Tested EM hadronic physics constructors:

- *G4EMStandard\_option3*
- *G4EMStandard\_option4*

### Tested hadronic physics constructors:

- *QMD*
- *QGSP\_BIC\_EMY*
- *QGSP\_BIC\_HP\_EMY*
- *QBBC*

-- SusannaGuatelli - 2018-11-27

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This topic: Geant4 > G4FragTest

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