



Questionnaire results

Radioactivity and activation

23 replies (as of 12h30. Thanks!)

Survey: Activation

- Which particles are generated and subsequently transported in FLUKA as a result of radioactive decay?
 - A. Photons, beta particles, **alphas, nucleons**. 12 (52.17%)
 - B. Only photons. 0 (0.00%)
 - C. **Gammas and betas, including x-rays and conversion electrons**. 10 (43.48%)
 - D. None. 1 (4.35%)

- The time-zero ($t=0$) relative to which any cooling time is calculated is defined to be...
 - A. ... at the beginning of the irradiation profile. 1 (4.35%)
 - B. ... **at the end of the irradiation profile**. 18 (78.26%)
 - C. ... In the middle of the irradiation profile. 0 (0.00%)
 - D. As specified by the user. 4 (17.39%)

Survey: Activation

- We want to calculate the activity in a region with a volume of 50 cm^3 . In the RESNUCLEi detector card we do not define the volume. The resulting activity is
 - A. ... the total activity in the region, expressed as Bq. 16 (69.57%)
 - B. ... the specific activity in Bq/cm^3 , as FLUKA takes into account the actual volume of the region automatically. 4 (17.39%)
 - C. ... the total activity in the region, expressed as Ci. 0 (0.00%)
 - D. ... is not calculated, since one input parameter is missing. 3 (13.04%)
- When calculating residual dose **rates**, the corresponding dose equivalent is given in units of...
 - A. $\mu\text{Sv/s}$. 15 (65.22%)
 - B. $\mu\text{Sv/h}$ 2 (8.70%)
 - C. $\mu\text{Sv/primary particle}$. 6 (26.09%)
 - D. rem/s 0 (0.00%)

Survey: Activation

- In order to simulate the radiation coming from the decay of a radioactive isotope as a source term, the option “Decay” in the RADDECAY card needs to be set to:
 - A. Active. 11 (47.83%)
 - B. Semi-Analogue. 9 (39.13%)
 - C. reset. 0 (0.00%)
 - D. The default value. 3 (13.04%)

