Exercise 2: (Compound) Materials

Beginners' FLUKA Course

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mkdir ex2
cd ex2
download the previous ex1.inp and rename it to ex2.inp
mv ex1.inp ex2.inp

❑ add two compound materials (beer and CO_2) and assign them to the target and the region around it (respectively)

emacs [or any editor] ex2.inp &

use as components the materials pre-defined in FLUKA

beer composition (MASS content):
90% WATER and 10% ETHANOL (CH3CH2OH)

calculate the density of CO_2 for standard conditions (22.4l/mol)

run your new ex2.inp in the ex2 dir
$FLUPRO/flutil/rfluka –N0 –M3 ex2 &

❑ compare the energy deposited into the target and the region around it, now and in the previous case (ex1 directory)

Do the same for the probability that a primary proton undergoes an inelastic collision (BEAMPART Star Density in the .out file)