Exercise 3: Geometry

Beginners' FLUKA Course

Exercise 3: Geometry

❑ Download the solution of ex2.inp from the website into a new **ex3** directory and rename it to ex3.inp

❑ Open it using FLAIR

❑ Replace the finite cylinder with an infinite one

use a ZCC body for the cylinder

use two XYP planes, at z=0. and z=10.cm, to cut it

re-define the regions TARGET and VOID

❑ Run

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❑ Segment the target into three pieces by two transverse cuts

1st segment: from z=0. to z=1.cm (new XYP needed)

2nd segment: from z=1.cm to z=2.cm (new XYP needed)

3rd segment: from z=2.cm to z=10.cm (no further bodies needed)

define the 3 target regions

assign them beer, ALUMINUM (pre-def), and LEAD (pre-def)

❑ Translate the target using start_translat

$x' = x + 2.718$ cm ; $z' = z + 3.14$ cm

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❑ activate the geometry debugging with a 1 mm grid (without FLAIR)

from (x,y,z)=(-6.,0.,-6.) to (x,y,z)=(6.,0.,11.)

see in the manual the GEOEND card

❑ Run and search for *Geometry debugging* in the .out file:

enjoy the lack of errors!

❑ Perform the same operation using the dedicated

FLAIR Process/Debug frame