Exercise 4: Geometry

Beginners' FLUKA Course

Exercise: Geometry

- Download the solution of ex2.inp from the website into a new **ex4** directory and rename it to ex4.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

Exercise: Geometry

- 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)

Exercise: Geometry

- activate the geometry debugging with a 1 mm grid (by modifying the GEOEND card) 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