Exercise 5: Geometry - II

FLUKA Beginner's Course

Exercise 5: Geometry - II

Aim of the exercise:

1- Get familiar with the Geometry Editor

2- Edit geometry using the Geometry Editor

3- Use of different layers of Geometry Editor

Exercise 5: Geometry - II

❏ Using Flair create the ex5 directory

❏ Start a new project based on the empty input template

❏ Try to reproduce the same geometry of exercise 4

using ONLY the Geometry Editor

❏ Play with the different views and layers

Exercise 5: Geometry - II

❑ One infinite ZCC cylinder. Radius = 5 cm , center in x=0, y=0

❑ Four XYP planes

❑ Surrounding medium CO_2

❑ Three target regions

From	To	Region	Material
z=0.	z=1.	TARGS1	Water
z=1.	z=2.	TARGS2	Aluminum
z=2.	z=10.	TARGS3	Lead

Water, Aluminum, and Lead are predefined materials

Exercise 5: Geometry - II

❑ Add also a BEAM card as in ex3 (will be useful later):

- Origin (x,y,z) = **(0.0, 0.0, -0.1)**

- Directed **toward positive z**

- Pencil proton beam

- Kinetic energy **E=3.5 GeV**

- Momentum Gaussian spread Δ**p= 0.8 GeV/c**

- Divergence Gaussian $\Delta\phi$**=1.7 mrad**