Subject: negative masses in geometry (TG3)
Posted by Olaf Hartmann on Wed, 20 Apr 2011 12:36:40 GMT
View Forum Message <> Reply to Message

Dear all,

when calculating the masses of the volumes in PandaRoot, I observed i.a. several masses with negative values, which actually comes from a negative volume size (!). Example:

Calculating the physical volume (which for a TGeoXtru is [length]^3):

```
root [43] gGeoManager->GetVolume("Supporto2")->Capacity()
(const Double_t)(-4.86071999981845693e+03)
```

These are the geo parameters of this object:

```
root [42] gGeoManager->GetVolume("Supporto2")->InspectShape()
*** Shape Supporto2: TGeoXtru ***
    Nz    = 2
    List of (x,y) of polygon vertices:
    x =   134.00000  y =   184.00000
    x =   130.51000  y =   184.00000
    x =   130.51000  y =   176.00000
    x =   134.00000  y =   176.00000
    x =   134.00000  y =   178.00000
    x =   156.70000  y =   178.00000
    x =   156.70000  y =   176.00000
    x =   159.20000  y =   176.00000
    x =   159.20000  y =   184.00000
    x =   156.70000  y =   184.00000
    x =   156.70000  y =   182.00000
    x =   134.00000  y =   182.00000
     plane 0: z=   -0.00000 x0=    0.00000 y0=    0.00000 scale=    1.00000
     plane 1: z=    2.00000 x0=    0.00000 y0=    0.00000 scale=    1.00000
 Bounding box:
*** Shape Supporto2: TGeoBBox ***
    dX =    14.34500
    dY =     4.00000
    dZ =     1.00000
    origin: x=  144.85500 y=  180.00000 z=    1.00000
```

Shouldn't it be that values like volume and mass always come out with positive values?
Of course I can ask for the abs value in the code to avoid negative values.

Cheers
Olaf.