
Subject: Re: shape of a volume - always TGeoBBox ?
Posted by [Olaf Hartmann](#) on Mon, 13 Dec 2010 15:39:09 GMT
[View Forum Message](#) <> [Reply to Message](#)

Dear all,

I just realized that asking the GeoManager about the shape of a volume he always answers TGeoBBox, which is a bounding box of each of the volumes, even if they're originally of type e.g. TGeoTube.

Quote:root [2] gGeoManager->GetVolume(1211)->GetShape()->InspectShape()

```
*** Shape stt01wire1880: TGeoTube ***
```

```
  Rmin =  0.00000
```

```
  Rmax =  0.00100
```

```
  dz =  31.80215
```

```
Bounding box:
```

```
*** Shape stt01wire1880: TGeoBBox ***
```

```
  dX =  0.00100
```

```
  dY =  0.00100
```

```
  dZ =  31.80215
```

```
  origin: x=  0.00000 y=  0.00000 z=  0.00000
```

As I wrote in the earlier mail, I tried to access the dimensions of the physical volumes:

```
TGeoVolume* actVolume = gGeoManager->GetVolume(fVolumeID);  
TGeoShape* actShape = actVolume->GetShape();  
const char* fShapeName = actShape->GetName();
```

fShapeName is always TGeoBBox. How can I arrive to the underlying shape (e.g. TGeoTube)
?

Cheers
Olaf.