
Subject: Re: Detector materials with radiation length not equal to zero
Posted by [Mohammad Al-Turany](#) on Sun, 11 Mar 2012 22:03:03 GMT
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Hi Raghav,

The radiation length cannot be set from the media file! sorry this is a mistake in the documentation which I just corrected, this has changed since very long time. The radiation length for media is simply calculated.

To calculate the radiation length for your detector, take a look to:

https://subversion.gsi.de/trac/fairroot/browser/pandaroot/trunk/macro/run/rad_complete_stt.C

it is a simulation macro but you have to activate the radiation length manager, i.e:

```
fRun->SetRadLenRegister(kTRUE);
```

and to make it run faster, set all your detectors to inactive, .i.e:

```
FairDetector *Mvd = new PndMvdDetector("MVD", kFALSE);
```

Which means the detector will not register any hits.

In the generator part you need to use Geantino in the box generator and you can set theta and phi to the values you want to scan.

The output of this macro, is a tree with "RadLen" branch which contains the info about the radiation length along the path you choose for simulation, the Radiation length manager registers a point each time it exits a volume in the geometry.

regards

Mohammad