
Subject: unit of energy in Lumi monitor reconstruction
Posted by [donghee](#) on Wed, 29 Jul 2009 19:59:08 GMT
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Dear Lumi experts,

What is the unit of reconstructed energy?

Quote:

```
PndLumiRecoHit *MyRecoHit = (PndLumiRecoHit*) reco_array->At(k);  
energy = MyRecoHit->GetRecoEnergy();
```

In 4 each lumi station, I see now following number in one particular beam particle (anti-proton).

Quote:

```
energy1 = 91531.3  
energy2 = 60571  
energy3 = 74528  
energy4 = 94786.3
```

I'm wondering why they don't have similar value?

cheers!

Subject: Re: unit of energy in Lumi monitor reconstruction
Posted by [Tsitohaina Randriamalala](#) on Thu, 30 Jul 2009 09:07:30 GMT
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Hi Donghee,

The unit that is used here is the eV.

The mean value of the energy deposited per hit is about 85 keV.

The values of the energy deposited at each sensor depend on how you set the threshold. A possible explanation of why you got different values of the charge is that you probably had at some hit after the digitization a multiplicity 2 or more that at one or some strips fired the charges are below the threshold.
