
Subject: PandaRoot 2.0

Posted by [Jens Sören Lange](#) on Tue, 16 Oct 2007 15:49:35 GMT

[View Forum Message](#) <> [Reply to Message](#)

Dear all,

here are a few notes about what we decided concerning PandaRoot 2.0 on the PandaRoot meeting Oct 20, 2007.

The tentative date for PandaRoot 2.0 release is Nov 7.

We decided, that the subdetector code for PandaRoot 2.0 should fulfill the following requirements:

1.) each subdetector should have the following existing data members

where XXX is the 3-letter acronym of the subdetector.

for single hit detectors XXX Digi
(e.g. DRC, TOF)

for cluster-type hit detectors XXXDigi and XXXCluster
(e.g. TPC, MVD, EMC etc.)

and an existing reconstruction to fill these structures.

The reconstruction can be preliminary (i.e. pre-amplifier, shaper, sampling frequencies etc. which might not be the final, optimized values).

2.) In addition to the preliminary reconstruction, each detector should deliver a task for ideal reconstruction, i.e. fill directly the XXXDigi and/or XXXCluster from XXXPoints.

3.) as documentation, each subdetector is asked to provide a diagram on the Wiki with the names of classes and data members

see the example for MVD

http://forum.gsi.de/index.php?t=msg&th=1575&rid=326&S=67b64f8f7aeff7dcdf4c2078b6bbec4f#msg_5211

4.) Each subdetector will have only one contact person who will receive write permission to the new /2_0_0 subversion branch, so that they might copy the code once it achieves a status for 2.0.

The subversion repository path will be

https://subversion.gsi.de/fairroot/release/pandaroot/2_0_0

List of contact persons with write permissions:

Beampipe Stefano Spataro
DCH Aleksandra Wronska
DRC Annalisa Cecchi (tbc)
EMC Stefano Spataro
HYP Alicia Sanchez
Magnet Stefano Spataro
MVD Ralf Kliemt
STT Pablo Genova
TOF Alicia Sanchez
TPC Sebastian Neubert (tbc)

Annalisa and Sebastian, is it O.K. to put your names here as contact persons?

best regards, Soeren

Subject: Re: PandaRoot 2.0
Posted by [Aleksandra Wronska](#) on Wed, 17 Oct 2007 10:30:01 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello Soeren,

your hints concerning naming conventions confused me a bit.

Didn't we agree that all PANDA-related detector classes should be named according to the scheme PndXxxSomething, where Xxx is the 3letter acronym? That's at least what I understood in Dubna, and I see that Dima has also changed the emc nomenclature like that.

cheers,
ola

Subject: Re: PandaRoot 2.0
Posted by [Sebastian Neubert](#) on Wed, 17 Oct 2007 13:14:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi!

Yes I will take responsibility of this.
Thanx!

Sebastian.

Subject: Re: PandaRoot 2.0
Posted by [Jens Sören Lange](#) on Wed, 17 Oct 2007 18:25:23 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Ola, yes, you are completely right.

PndXxxSomething.

(one day before I posted, I had the text checked by several people, and nobody noticed - I guess it was just implicitly clear to everyone, but as you mention - the class nomenclature should be correctly followed as decided before; but I guess that will be fine for everyone).

Soeren

Subject: Re: PandaRoot 2.0
Posted by [asanchez](#) on Thu, 18 Oct 2007 08:07:45 GMT
[View Forum Message](#) <> [Reply to Message](#)

I have to add one comment,
i will update also the version for the germanium dtectors
in hypGe.

best regrads
alicia.

Subject: Re: PandaRoot 2.0
Posted by [Tobias Stockmanns](#) on Thu, 18 Oct 2007 09:18:34 GMT
[View Forum Message](#) <> [Reply to Message](#)

Unfortunately I was not in Dubna, so can somebody please repeat the argument, why we should change our class names to PndXXX.

This is a significant amount of work and makes long class names even longer. We are already working in pandaRoot which clarifies, that this are not Cbm classes but panda ones.

Cheers,

Tobias

Subject: Re: PandaRoot 2.0
Posted by [Tobias Stockmanns](#) on Thu, 18 Oct 2007 09:24:58 GMT
[View Forum Message](#) <> [Reply to Message](#)

Dear Soeren,

what do you mean with a XXXCluster. Is this a collection of digis which belong to one cluster or is this the reconstructed point out of your cluster. For me this is not clear.

In the Mvd we have the following chain: MvdPoint->MvdDigi->MvdClusterCand->MvdHit

- the MvdPoint is the MC information

- the MvdDigi is the fired pixel
- the MvdClusterCand are all the digis fired for one cluster (just pointers to digis)
- The MvdHit is the reconstructed point out of the MvdDigis marked by the MvdClusterCand

Cheers,

Tobias

Subject: Re: PandaRoot 2.0

Posted by [Jens Sören Lange](#) on Thu, 18 Oct 2007 09:45:15 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Tobias, what was the MvdCluster which Ralf had in his original scheme?
(which he showed on the meeting last week, top right).

[http://forum.gsi.de/index.php?t=tree&th=1369&start=0&rid=0&am](http://forum.gsi.de/index.php?t=tree&th=1369&start=0&rid=0&S=cc1a96d3567fe26a146ba569aca)
[p;S=cc1a96d3567fe26a146ba569aca](http://forum.gsi.de/index.php?t=tree&th=1369&start=0&rid=0&S=cc1a96d3567fe26a146ba569aca)

i.e. is the MvdCluster the MvdHit according to your scheme?

(I am asking because there is a RecoHit, bottom left).

cheers, Soeren

Subject: Re: PandaRoot 2.0

Posted by [Tobias Stockmanns](#) on Thu, 18 Oct 2007 11:14:38 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi Soeren,

this diagram is not up to date anymore, but MvdCluster would correspond to a point in 3-D space and is derived from CbmHit.

I am not very happy with this naming scheme. In my understanding the process of clustering means to find digis which belong to one hit. And a cluster is a collection of these digis. To get out of these cluster again a 3-D point I would call backmapping or reconstruction but not cluster.

Cheers,

Tobias
