
Subject: MC Truth propagation with FairLinks in timebased sim

Posted by [Marcel Tiemens](#) on Fri, 05 Feb 2016 16:59:39 GMT

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

Dear all,

I'm experiencing trouble with the MC propagation in the timebased simulation. Already at the digitisation stage, the link propagation appears to be broken. The digitisation macro returns "-E- FairMultiLinkedData_Interface::AddInterfaceData EntryNr == (-1/-1/-1/-1/1)" for each hit. SetUseFairLinks is set to true in all macros. As far as I can grasp together from the code, this is the way the links are propagated:

PndEmcHitProducer: MCTrack->EmcHit:

```
PndEmcPoint* point = (PndEmcPoint*) fPointArray->At(iPoint);  
DetId = point->GetDetectorID();
```

```
if (point->GetEntering()){  
    fTrackEntering[DetId].AddLinks(point->GetLinksWithType(FairRootManager::Instance()->GetBranchId("MCTrack")));  
}  
if (point->GetExiting()){  
    fTrackExiting[DetId].AddLinks(point->GetLinksWithType(FairRootManager::Instance()->GetBranchId("MCTrack")));  
}
```

PndEmcFWEndcapTimebasedWaveforms: EmcHit->EmcWaveform:

```
FairLink linkToHit(-1, ioman->GetEntryNr(), "EmcHit", iHit, 1.0);  
wfData.AddHit(linkToHit, ioman->GetEventTime() + theHit->GetTime()*1.0e9,  
theHit->GetEnergy());
```

PndEmcFWEndcapDigi: EmcWaveform->EmcDigi:

```
myDigi->AddLink(FairLink("EmcWaveform", iWaveform));
```

PndEmcMakeClusterOnline: EmcDigi->EmcCluster:

```
cluster->addDigi(fDigiArray,myDigi);  
cluster->AddLink(FairLink("EmcDigi", myDigi));
```

Can anyone see where it goes wrong, and maybe even if there is a simple fix for this? It would be preferable to have the ability to use the MC information.
