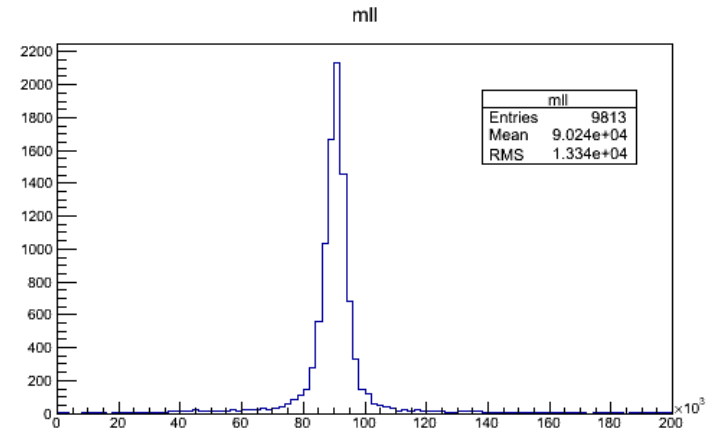
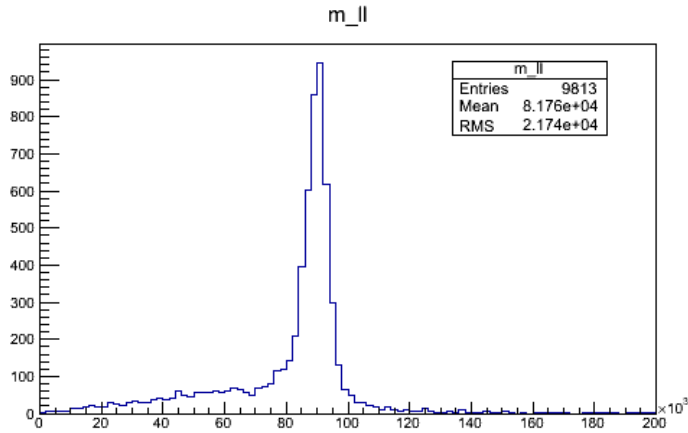


Weekly meeting

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11/12/2014

WWyy

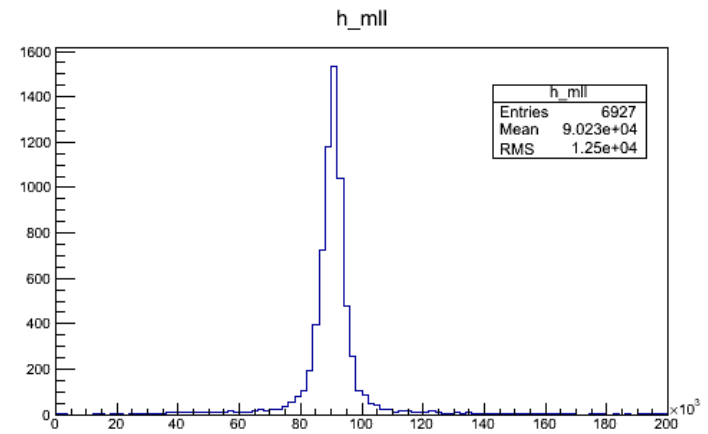


$$p_x = p_T \cos \phi$$

$$p_y = p_T \sin \phi$$

$$p_z = p_T \sinh \eta.$$

$$M^2 = 2p_{T1}p_{T2}(\cosh(\eta_1 - \eta_2) - \cos(\phi_1 - \phi_2)).$$



The cut in the case

- `if((wlep_pt->size()<2) || (wlep_eta->size()<2) || (wlep_phi->size()<2) || (wlep_E->size()<2))continue;`
- In the case, you have to use the cut above, or you can not get two sets of Pt, phi, eta.
- It had better to add a cut to decide if the phi is bigger than pi. But I didn't do it.

Developing CP Tools for the xAOD

- **Creating your tool**

in your working area

\$asetup AthAnalysisBase,here,2.0.15

\$acmd.py cmt new-pkg **MyNewToolPackage** (depends on what you need)

There are some basic directories in the **MyNewToolPackage**

- cmt/Makefile.RootCore
- cmt/requirements
- Root/
- Root/LinkDef.h
- MyNewToolPackage/IMyNewTool.h
- MyNewToolPackage/MyNewTool.h
- Root/MyNewTool.cxx
- src/components/MyNewToolPackage_load.cxx
- src/components/MyNewToolPackage_entries.cxx
- ChangeLog

And something else needed in your own tool.

IDSmearingTool

in working area

```
$asetup AthAnalysisBase,here,2.0.15
```

```
$acmd.py cmt new-pkg IDSmearinTool
```

I have added the special files in the IDSmearingTool directory.

- cmt/Makefile.RootCore
- cmt/requirements
- Root/
- Root/LinkDef.h
- MyNewToolPackage/I IDSmearingTool.h
- MyNewToolPackage/ IDSmearingTool .h
- Root/ IDSmearingTool.cxx
- src/components/ IDSmearingTool package_load.cxx
- src/components/ IDSmearingTool Package_entries.cxx
- ChangeLog

I am failed to build my package.

The reason maybe is that I have not added the other necessary bits in IDSmearing package which I notice them after I built the IDSmearingTool