Subject: getting run_rutherford to calculate eta parameter [SOLVED]
Posted by Raphael Cervantes on Wed, 14 Nov 2012 20:18:02 GMT

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Hi all,
I would like to request help in modifying fairroot to give me information about
eta=-log(tan(theta/2)), which is a very common parameter for understanding detector physics.
Moreover, I think it should calculate eta by default, in the same way that it calculates phi and
theta by default.

To give more background:
The way fairbase is in the repository, if you do
root fairroot/examples/rutherford/macros/run_rutherford.C
the output is contained in fairroot/examples/rutherford/macros/data/test.mc.root.

If I open the root file
root data/test.mc.root
TBrowser j
Then you will see the attached image. I would like to modify fairroot to include information
about eta as one of the leaves of FairRutherfordPoint. Can someone tell me how to do that?
Would I need to make changes to FairRutherfordPoint? FairMCPoint? etc...

I hope I'm making myself clear. All help is greatly appreciated
-Raphael

File Attachments
1) test.mc.root.png, downloaded 504 times

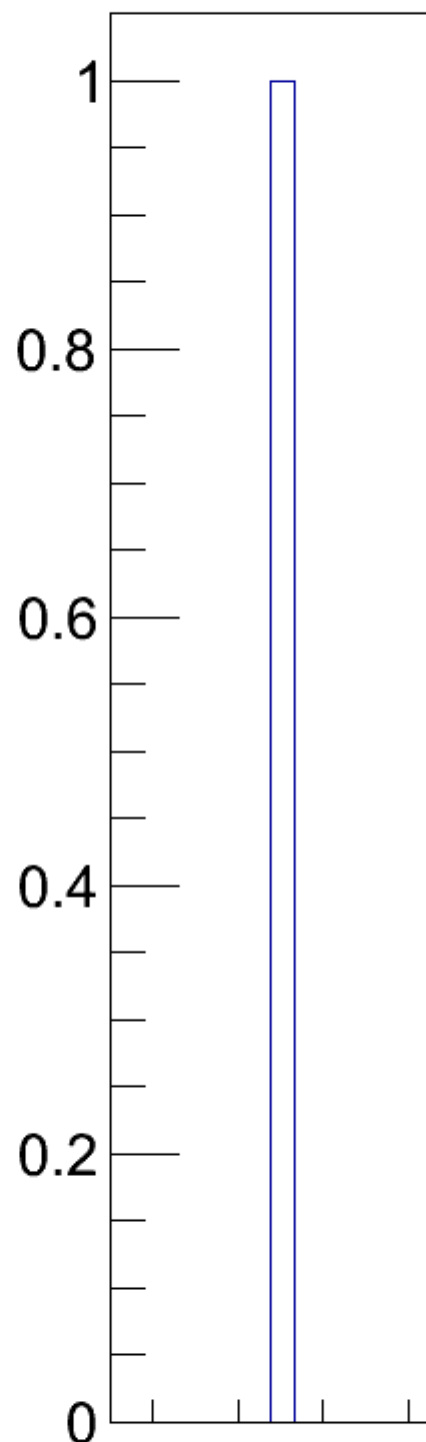# T Object Browser

Browser File Edit View Options Tools

Files

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- 📁 root
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- 📁 ROOT Files
  - 📁 data/test.mc.root
    - 📁 cbmroot;1
    - 📁 BranchList;1
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    - 📁 cbmsim;1
      - 📈 MCTrack
      - 📈 FairRutherfordPoint
        - 🦎 FairRutherfordPoint.fUniqueID
        - 🦎 FairRutherfordPoint.fBits
        - 📈 FairRutherfordPoint.fLinks
        - 🦎 FairRutherfordPoint.fPersistanceCheck
        - 🦎 FairRutherfordPoint.fVerbose
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        - 🦎 FairRutherfordPoint.fPx
        - 🦎 FairRutherfordPoint.fPy
        - 🦎 FairRutherfordPoint.fPz
        - 🦎 FairRutherfordPoint.fTime
        - 🦎 FairRutherfordPoint.fLength
        - 🦎 FairRutherfordPoint.fELoss
        - 🦎 FairRutherfordPoint.fDetectorID
        - 🦎 FairRutherfordPoint.fX
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          - 📁 eicroot
          - 📁 fairbase
          - 📁 fairroot
          - 📁 fastjet-3.0.3
          - 📁 h1dummy

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Command

Command (local): [   ]