
Subject: Re: Reading a tree HELP!

Posted by [asanchez](#) on Thu, 22 Jan 2015 14:48:31 GMT

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Hi Mamaen,

here you are some lines as example how to get read of the TParticle Info in a TTree .

```
TFile *tf1 = new TFile("the file");
TTree *data = (TTree*)tf1->Get("data");
TClonesArray* hit_array=new TClonesArray("TParticle",100);
data->SetBranchAddress("Particles",&hit_array);//Branch names

for (Int_t j=0; j<data->GetEntries(); j++)
{
    // if ((j)%100000==0)cout <<"evt: "<<j<<endl;

    data->GetEntry(j); // Loop over particles in TClonesArray

    for (Int_t iPart=0; iPart < nParts; iPart++) {

        TParticle* part = (TParticle*) hit_array->At(iPart);
        Int_t pdgType = part->GetPdgCode();

        //you can use the member function of TParticle to get the kinematic information

        TLorentzVector lv1;

        part->Momentum(lv1);

        TVector3 v1;

        v1= lv1.Vect();

        // Total momentum

        Double_t P;

        P = part->P();

        // theta

        Double_t theta;

        theta = part->Theta();

    }
```

}
