Subject: works interactively but not in a macro
Posted by Olaf Hartmann on Tue, 17 Jul 2007 14:03:04 GMT

Hi ROOTers,

I'm quarreling with the following problem:

The sequence
root [15] partlist = TDatabasePDG::Instance();
root [16] TParticlePDG* part;
root [17] part = partlist->GetParticle("neutron");
root [18] Int_t mynumber = part.PdgCode()
root [19] mynumber
(Int_t)2112

works interactively. But inside a macro, I get the following
error message:

Error: illegal pointer to class object part 0x0 1034 FILE:conv_urqmd.C LINE:467
*** Interpreter error recovered ***

exactly at the point where the function part.PdgCode() is used.

Any idea?

Kindly,
Olaf.

Subject: Re: works interactively but not in a macro
Posted by wuestenf on Wed, 18 Jul 2007 15:14:29 GMT

Hello Olaf,

root [16] TParticlePDG* part;

Is giving you the problem. You define part as a pointer to a TParticlePDG, so you should also use it as a pointer later.

So the correct line to access the memberfunction is:

Int_t mynumber = part->PdgCode()

This shouldalso work in a macro and in compiled code.

Hope this helps.

Joern

Hi Jörn,

Quote:
root [16] TParticlePDG* part;

Is giving you the problem. You define part as a pointer to a TParticlePDG, so you should also use it as a pointer later.

So the correct line to access the memberfunction is:

Int_t mynumber = part->PdgCode()

This should also work in a macro and in compiled code.

Unfortunately, in the macro it doesn't work neither. Actually
I tried it before with that syntax, the same result.
I couldn't figure out why this member function shouldn't be
accessible that way in a macro. Furthermore, the very same macro
once (some time ago) worked. So I already tried different
ROOT versions.

Cheers,
Olaf.

Hello Olaf,

I tried your macro and it runs.
{

partlist = TDatabasePDG::Instance();
TParticlePDG* part;
part = partlist->GetParticle("neutron");
Int_t mynumber = part->PdgCode();
std::cout<<mynumber<<std::endl;

}
I have root Version 5.14/00 and run on a SUSE 10.2.
Maybe you should try to catch if the pointer is not set properly. I've seen that you want to use this inside a macro for a particle generator. Maybe the TDatabasePDG is already loaded and modified by this.

Have a nice weekend,

Ralf.