
Subject: Re: genfit2 update - bugs(?)

Posted by [Elisabetta Prencipe \(2\)](#) on Fri, 06 Nov 2015 09:10:37 GMT

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Dear Stefano, dear all,

I performed additional tests with genfit2, as there are some complains from the community. I summarize here the results of my preliminary tests, performed using a /development/branch where only genfit2 is in, `_not_ genfit(1)`.

I have set the number of iterations to 1, 3, 5, 10, and check the memory consumption. The results are the following:

- a) file used: ppbar to Ds- Ds+ (Lu Cao analysis);
- b) number of generated events: 2000;

Using genfit2, when I run the macro/run/reco_complete.C, I get:

```
with num lter = 1 -----> 1045 MB
with num lter = 3 -----> 1070 MB
with num lter = 5 -----> 1094 MB
with num lter = 10 -----> 1109 MB
```

In the tests performed by Lu in the new trunk, the memory consumption when using genfit2 is 6559 MB. Clearly these numbers are not compatible each others.

Being the fact that genfit2 standalone code can run on my pc 500 000 events without any problem of memory leak, my conclusion is that - in case of problems in pandaroot- we have only 2 possibilities:

- 1) the interface GenfitTools is bugged;
or/and
- 2) the switch old-genfit vs genfit2 is bugged

My tests demonstrated that, in a branch where only genfit2 is in, the interface GenfitTools works fine. It is my opinion that in the new trunk the switch GF1 vs GF2 is corrupted. This brings me to ask you: what is the sense to have in the same trunk or release the old-genfit `_and_ genfit2`? genfit1 has clear problems, that genfit2 corrects. Once again I say, we should exclude genfit1 from the next trunks and releases, because this can cause troubles.

My plan is now to create a new /development/branch, where the release mar15 is adapted to use genfit2 only (it mean: I will eliminate any track on genfit1, and I will configure again the other packages where the genfit classes are called somehow), and I will show at the collaboration meeting the results of this last test.

A discussion on how to proceed at the coll meeting is needed. I would be in favor to forget about the old non-maintained genfit, and use only the new updated and maintained genfit2.

Best regards, Elisabetta
