Subject: Re: Error during PndTpcElectronicsTask
Posted by Felix Boehmer on Tue, 21 Dec 2010 15:42:39 GMT
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Hi again,

I started out with the simulations of many thousand BoxGen Events (each multiplicity = 5).
My first observations are:

I don't seem to be able to reproduce the crash
I see strange memory consumption behavior

Memory consumption is noteworthy:

Memory load *slowly* grows step-wise, compatible with the fact that the TClonesArrays in memory will always have the size given by the largest event... saturating at roughly 500 MB
Memory load on these "plateaus" is stable -> no big memory leaks
There *are* bad events that blow up memory load so much my system begins to swap
The load stays high for many events, then falls back to a reasonable baseline

This is strange behavior indeed. The fact that the memory load *drops* again after some time after the bad event proves that the memory consumption can not be caused by objects that live in the TClonesArrays, since that size would never decrease again. Also it can't be temporary events of one event, since they would have to disappear before the next event is processed, which is not what I see. The current guess is that the caching of the out-TTree is causing this...

I'll look into the TPC container classes as well as the FairLinks mechanism. There will probably be some redesigning. This is going to take a while.
Meanwhile I would appreciate any input from other users that extends "there is something wrong with the TPC classes and the FairLinks"

Cheers

Felix