
Subject: Re: bug in PidCorrelator

Posted by [Johannes Rauch](#) on Fri, 29 Jul 2011 14:00:05 GMT

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Hi,

I reverted my FairGeanePro to make sure I didn't mess up something there. Then I added a

```
fRes->Print();
```

in line 48 (just before propagation) in PndPidTrackInfo.cxx

It crashes now somewhere else, but I also experienced this crash already yesterday.

So maybe there are even two bugs.

Any ideas?

regards,

Johannes

```
0x1d5322a0
```

```
Position : (0.0, 0.0, 0.0)
```

```
Angles : Lambda = 0.0, Phi = 0.0
```

```
q/p = 0.0
```

```
fCovMatrix[0] = 0x1d5322a0 0.0
```

```
fCovMatrix[1] = 0x1d5322a0 0.0
```

```
fCovMatrix[2] = 0x1d5322a0 0.0
```

```
fCovMatrix[3] = 0x1d5322a0 0.0
```

```
fCovMatrix[4] = 0x1d5322a0 0.0
```

```
fCovMatrix[5] = 0x1d5322a0 0.0
```

```
fCovMatrix[6] = 0x1d5322a0 0.0
```

```
fCovMatrix[7] = 0x1d5322a0 0.0
```

```
fCovMatrix[8] = 0x1d5322a0 0.0
```

```
fCovMatrix[9] = 0x1d5322a0 0.0
```

```
fCovMatrix[10] = 0x1d5322a0 0.0
```

```
fCovMatrix[11] = 0x1d5322a0 0.0
```

```
fCovMatrix[12] = 0x1d5322a0 0.0
```

```
fCovMatrix[13] = 0x1d5322a0 0.0
```

```
fCovMatrix[14] = 0x1d5322a0 0.0
```

```
-W- PndPidCorrelator::GetMvdInfo: Track perpendicular to MVD strip/pixel! Not added to MVD  
eloss
```

```
-W- PndPidCorrelator::GetMvdInfo: Track perpendicular to MVD strip/pixel! Not added to MVD  
eloss
```

```
-W- PndPidCorrelator::GetMvdInfo: Track perpendicular to MVD strip/pixel! Not added to MVD  
eloss
```

```
-W- PndPidCorrelator::GetMvdInfo: Track perpendicular to MVD strip/pixel! Not added to MVD  
eloss
```

```
ABORT
```

*** Break *** floating point exception

=====

There was a crash (#6 0xb71efe3d in SigHandler(ESignals) ()).

This is the entire stack trace of all threads:

=====

```
#0 0xb65b295e in __waitpid_nocancel ()
    at ../sysdeps/unix/syscall-template.S:82
#1 0xb6554c93 in do_system (line=<value optimized out>)
    at ../sysdeps/posix/system.c:149
#2 0xb666ed6d in system (
    line=0x1cf45750
"/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/etc/gdb-backtrace.sh 30118 1>&2")
    at pt-system.c:29
#3 0xb71ea33d in TUnixSystem::Exec(char const*) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#4 0xb71f091a in TUnixSystem::StackTrace() ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#5 0xb71efd2f in TUnixSystem::DispatchSignals(ESignals) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#6 0xb71efe3d in SigHandler(ESignals) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#7 0xb71e6ee2 in sighandler(int) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#8 <signal handler called>
#9 0xaf6d595e in PndPidCandidate (this=0x15824440)
    at /nfs/hicran/project/panda/SIM/jrauch/clean/pid/PidData/PndPidCandidate.h:31
#10 0xaf6d3e45 in PndPidCorrelator::AddNeutralCandidate (this=0x9e2afe0,
    cand=0x1d8eda68)
    at /nfs/hicran/project/panda/SIM/jrauch/clean/pid/PidCorr/PndPidCorrelator.cxx:1197
#11 0xaf6d045b in PndPidCorrelator::ConstructNeutralCandidate (this=0x9e2afe0)
    at /nfs/hicran/project/panda/SIM/jrauch/clean/pid/PidCorr/PndPidCorrelator.cxx:703
#12 0xaf6cf139 in PndPidCorrelator::Exec (this=0x9e2afe0, option=0xb36d32d8 "")
    at /nfs/hicran/project/panda/SIM/jrauch/clean/pid/PidCorr/PndPidCorrelator.cxx:539
#13 0xb7170e78 in TTask::ExecuteTasks(char const*) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
```

```

#14 0xb717015e in TTask::ExecuteTask(char const*) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#15 0xb361c9d4 in FairRunAna::Run (this=0x967a1d8, Ev_start=0, Ev_end=200)
    at /nfs/hicran/project/panda/SIM/jrauch/clean/base/FairRunAna.cxx:353
#16 0xb367802d in G__FairDict_894_0_5 (result7=0xbfdbf5e8,
    funcname=0x9677e70 "", libp=0xbfdb4fa4, hash=0)
    at /nfs/hicran/project/panda/SIM/jrauch/clean/build/base/FairDict.cxx:13775
#17 0xb6a5be97 in Cint::G__ExceptionWrapper(int (*)(G__value*, char const*, G__param*,
int), G__value*, char*, G__param*, int) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#18 0xb6b0ac8f in G__execute_call ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#19 0xb6b0bb2a in G__call_cppfunc ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#20 0xb6ae61a5 in G__interpret_func ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#21 0xb6ad367d in G__getfunction ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#22 0xb6bcf004 in G__getstructmem(int, G__FastAllocString&, char*, int, char*, int*,
G__var_array*, int) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#23 0xb6bc4d09 in G__getvariable ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#24 0xb6aac618 in G__getitem ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#25 0xb6ab2c17 in G__getexpr ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#26 0xb6b3ad74 in G__exec_statement ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#27 0xb6a980cd in G__exec_tempfile_core ()

```

```

from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#28 0xb6a983bb in G__exec_tempfile ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#29 0xb6b4f124 in G__process_cmd ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCint.so
#30 0xb71abdcb in TCint::ProcessLine(char const*, TInterpreter::EErrorCode*) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#31 0xb71ab911 in TCint::ProcessLineSynch(char const*, TInterpreter::EErrorCode*) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#32 0xb70fae8a in TApplication::ExecuteFile(char const*, int*, bool) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#33 0xb70fb2dc in TApplication::ProcessFile(char const*, int*, bool) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#34 0xb70f877f in TApplication::ProcessLine(char const*, bool, int*) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#35 0xb67ed818 in TRint::HandleTermInput() ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libRint.so
#36 0xb67ebee5 in TTermInputHandler::Notify() ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libRint.so
#37 0xb67eec04 in TTermInputHandler::ReadNotify() ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libRint.so
#38 0xb71ee067 in TUnixSystem::CheckDescriptors() ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#39 0xb71ee235 in TUnixSystem::DispatchOneEvent(bool) ()
    from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#40 0xb715e3a1 in TSystem::InnerLoop() ()

```

```

from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#41 0xb7161049 in TSystem::Run() ()
from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#42 0xb70f6537 in TApplication::Run(bool) ()
from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#43 0xb67ee519 in TRint::Run(bool) ()
from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libRint.so
#44 0x08048eaf in main ()
#45 0xb6532c76 in __libc_start_main (main=0x8048e40 <main>, argc=2,
    ubp_av=0xbfdc8c44, init=0x8049040 <__libc_csu_init>,
    fini=0x8049030 <__libc_csu_fini>, rtld_fini=0xb772d040 <_dl_fini>,
    stack_end=0xbfdc8c3c) at libc-start.c:228
#46 0x08048d71 in _start ()
=====

```

The lines below might hint at the cause of the crash.
 If they do not help you then please submit a bug report at
<http://root.cern.ch/bugs>. Please post the ENTIRE stack trace
 from above as an attachment in addition to anything else
 that might help us fixing this issue.

```

=====
#9 0xaf6d595e in PndPidCandidate (this=0x15824440)
    at /nfs/hicran/project/panda/SIM/jrauch/clean/pid/PidData/PndPidCandidate.h:31
#10 0xaf6d3e45 in PndPidCorrelator::AddNeutralCandidate (this=0x9e2afe0,
    cand=0x1d8eda68)
    at /nfs/hicran/project/panda/SIM/jrauch/clean/pid/PidCorr/PndPidCorrelator.cxx:1197
#11 0xaf6d045b in PndPidCorrelator::ConstructNeutralCandidate (this=0x9e2afe0)
    at /nfs/hicran/project/panda/SIM/jrauch/clean/pid/PidCorr/PndPidCorrelator.cxx:703
#12 0xaf6cf139 in PndPidCorrelator::Exec (this=0x9e2afe0, option=0xb36d32d8 "")
    at /nfs/hicran/project/panda/SIM/jrauch/clean/pid/PidCorr/PndPidCorrelator.cxx:539
#13 0xb7170e78 in TTask::ExecuteTasks(char const*) ()
from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#14 0xb717015e in TTask::ExecuteTask(char const*) ()
from
/nfs/hicran/project/panda/SIM/FAIRRoot/fairsoft_release_may11/tools/root_5.28d_qt_custom_
TH2Poly/lib/libCore.so
#15 0xb361c9d4 in FairRunAna::Run (this=0x967a1d8, Ev_start=0, Ev_end=200)
    at /nfs/hicran/project/panda/SIM/jrauch/clean/base/FairRunAna.cxx:353
=====

```