
Subject: Event Dsisplay

Posted by [Anonymous Poster](#) on Sun, 15 Mar 2009 17:59:10 GMT

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Hi,

I am looking for some way to do an event visualization. I remember that there has been something implemented in PANDAROOT. Can anybody give me a hint on how to run an example? I tried, but the macro run/run_sim_vis.C, but that crashed with the following output. Does anybody have an idea?

Thanks, Christian

detector I/Os: FairGenericParlo

**** GTRIGI: IEVENT= 1 IDEVT= 1 Random Seeds = 4357 0

FairMCApplication::GeneratePrimaries()

-I FairPrimaryGenerator: 5 primary tracks from vertex (0, 0, 0)Event Time = 0(ns)

*** GTRACK *** More than 10000 steps, tracking abandoned!

=====> TRACK 1 STACK NR 0 NTMULT= 5 GAMMA TOFG =

12.131 NS

X	Y	Z	R	NAME	NUMBER	SLENG	STEP	DESTEP	GEKIN
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-34.5252	-13.1284	258.9147	36.9371	cave	1	22.7774	0.0003	0.0 eV	6.706
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MeV NEXT STOP

IEVENT 1 IDEVT 1 Random Seeds 4357 0 Time of flight 12.131 ns

*** Break *** segmentation violation

Using host libthread_db library "/lib/tls/i686/cmov/libthread_db.so.1".

Attaching to program: /proc/18256/exe, process 18256

[Thread debugging using libthread_db enabled]

[New Thread -1228154656 (LWP 18256)]

0xffffe410 in __kernel_vsyscall ()

#1 0xb6d7a2f3 in waitpid () from /lib/tls/i686/cmov/libc.so.6

#2 0xb6d22669 in strtold_l () from /lib/tls/i686/cmov/libc.so.6

#3 0xb6e29add in system () from /lib/tls/i686/cmov/libpthread.so.0

#4 0xb7a514f9 in TUnixSystem::Exec (this=0x80dd5f0,

#5 0xb7a50a17 in TUnixSystem::StackTrace (this=0x80dd5f0)

at core/unix/src/TUnixSystem.cxx:2121

#6 0xb7a53986 in TUnixSystem::DispatchSignals (this=0x80dd5f0, sig=kSigSegmentationViolation) at core/unix/src/TUnixSystem.cxx:1089

#7 0xb7a53ab3 in SigHandler (sig=kSigSegmentationViolation)

at core/unix/src/TUnixSystem.cxx:351

#8 0xb7a4a100 in sighandler (sig=11) at core/unix/src/TUnixSystem.cxx:3344

#9 <signal handler called>

#10 0xb6870fcb in TGeoNavigator::FindNextDaughterBoundary (this=0x87346c0, point=0xbffa49c0, dir=0xbffa49a8, idaughter=@0xbffa49a4, compmatrix=false) at geom/geom/src/TGeoNavigator.cxx:905

#11 0xb68760d5 in TGeoNavigator::FindNextBoundary (this=0x87346c0, stepmax=16361.9052734375, path=0xade68500 "", frombdr=false) at geom/geom/src/TGeoNavigator.cxx:613

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#12 0xb68541b5 in TGeoManager::FindNextBoundary (this=0x84c5e20,
    stepmax=16361.9052734375, path=0xade68500 "", frombdr=false)
    at geom/geom/src/TGeoManager.cxx:2295
#13 0xaddf2cb3 in gtnextTGeo () at TGeant3/TGeant3TGeo.cxx:2285
#14 0xadde1fce in gtnext_ () at TGeant3/TGeant3.cxx:6581
#15 0xadc597f7 in g3tneut_ () at gtrak/gtneut.F:125
#16 0xadc60723 in g3track_ () at gtrak/gtrack.F:251
#17 0xaddf157a in gutrak_ () at TGeant3/TGeant3gu.cxx:555
#18 0xadc61ab6 in gtreveroot_ () at gtrak/gtreveroot.F:168
#19 0xaddf1547 in gutrev_ () at TGeant3/TGeant3gu.cxx:575
#20 0xadd7901 in jumpt0_ (iadr=0xadf08fa0) at minicern/jumptn.c:74
#21 0xad328b8 in g3trig_ () at gbase/gtrig.F:62
#22 0xaddea25d in TGeant3::Gtrig (this=0x8900888) at TGeant3/TGeant3.cxx:3153
#23 0xadde1e3e in TGeant3::ProcessEvent (this=0x8900888)
    at TGeant3/TGeant3.cxx:6256
#24 0xadde43a9 in TGeant3::ProcessRun (this=0x8900888, nevent=10)
    at TGeant3/TGeant3.cxx:6226
#25 0xb42d919f in FairMCApplication::RunMC (this=0x873b920, nofEvents=10)
    at /afs/e18.ph.tum.de/panda/SIM/hoepner/trunk/base/FairMCApplication.cxx:2 28
#26 0xb42ed96f in FairRunSim::Run (this=0x869efe8, NStart=10, NStop=0)
    at /afs/e18.ph.tum.de/panda/SIM/hoepner/trunk/base/FairRunSim.cxx:289
#27 0xb4330284 in G__FairDict_532_0_5 (result7=0xbffac808,
    funcname=0x8695ec8 "\001", libp=0xbffa63c4, hash=0)
    at /afs/e18.ph.tum.de/panda/SIM/hoepner/trunkBuild/base/FairDict.cxx:9292
#28 0xb714902a in Cint::G__ExceptionWrapper (
    funcp=0xb433019a <G__FairDict_532_0_5>, result7=0xbffac808,
    funcname=0x8695ec8 "\001", libp=0xbffa63c4, hash=0)
    at cint/cint/src/Api.cxx:364
#29 0xb7211817 in G__execute_call (result7=0xbffac808, libp=0xbffa63c4,
    ifunc=0x8695ec8, ifn=0) at cint/cint/src/newlink.cxx:2305
#30 0xb7216db4 in G__call_cppfunc (result7=0xbffac808, libp=0xbffa63c4,
    ifunc=0x8695ec8, ifn=0) at cint/cint/src/newlink.cxx:2471
#31 0xb71d77e4 in G__interpret_func (result7=0xbffac808,
    funcname=0xbffac208 "Run", libp=0xbffa63c4, hash=309, p_ifunc=0x8695ec8,
    funcmatch=1, memfunc_flag=1) at cint/cint/src/ifunc.cxx:5245
#32 0xb71c77f5 in G__getfunction (item=0xbffb12c6 "Run(nEvents)",
    known3=0xbffaf4cc, memfunc_flag=1) at cint/cint/src/func.cxx:2534
#33 0xb72b23fa in G__getstructmem (store_var_type=112,
    varname=0xbffae6ec "\001", membername=0xbffb12c6 "Run(nEvents)",
    tagname=0xbffae8ec "fRun", known2=0xbffaf4cc, varglobal=0xb736ae00,
    objptr=2) at cint/cint/src/var.cxx:6623
#34 0xb72a42fc in G__getvariable (item=0xbffb12c0 "fRun->Run(nEvents)",
    known=0xbffaf4cc, varglobal=0xb736ae00, varlocal=0x0)
    at cint/cint/src/var.cxx:5252
#35 0xb71a2ad2 in G__getitem (item=0xbffb12c0 "fRun->Run(nEvents)")
    at cint/cint/src/expr.cxx:1884
#36 0xb71b0413 in G__getexpr (expression=0xbffb1968 "fRun->Run(nEvents)")
    at cint/cint/src/expr.cxx:1470
#37 0xb72282a8 in G__exec_function (statement=0xbffb1968 "fRun->Run(nEvents)",
    pc=0xbffb205c, piout=0xbffb2058, plargestep=0xbffb2050, presult=0xbffb2008)
    at cint/cint/src/parse.cxx:601
#38 0xb722d44e in G__exec_statement (mparen=0xbffb9318)

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at cint/cint/src/parse.cxx:6972
#39 0xb718d63f in G__exec_tempfile_core (
  file=0xbffbb414 "/afs/e18/panda/SIM/hoepner/./trunk/macro/run/run_sim_vis.C", fp=0x0) at
cint/cint/src/debug.cxx:251
#40 0xb718d889 in G__exec_tempfile (
  file=0xbffbb414 "/afs/e18/panda/SIM/hoepner/./trunk/macro/run/run_sim_vis.C") at
cint/cint/src/debug.cxx:798
#41 0xb723dd00 in G__process_cmd (line=0xb7edd443 "]", prompt=0x80dff54 "",
  more=0x80dff4c, err=0xbffbc2f4, rslt=0xbffbc2c0)
  at cint/cint/src/pause.cxx:3074
#42 0xb7a3cb5a in TCint::ProcessLine (this=0x80dff30, line=0xb7edd443 "]",
  error=0xbffbea8c) at core/meta/src/TCint.cxx:339
#43 0xb7a3459f in TCint::ProcessLineSynch (this=0x80dff30,
  line=0xb7edd443 "]", error=0xbffbea8c) at core/meta/src/TCint.cxx:406
#44 0xb7947474 in TApplication::ExecuteFile (
  file=0xbffbca51 "trunk/macro/run/run_sim_vis.C", error=0xbffbea8c)
  at core/base/src/TApplication.cxx:936
#45 0xb7947646 in TApplication::ProcessFile (this=0x8100ff8,
  file=0xbffbca51 "trunk/macro/run/run_sim_vis.C", error=0xbffbea8c)
  at core/base/src/TApplication.cxx:825
#46 0xb7949c3f in TApplication::ProcessLine (this=0x8100ff8,
  line=0xbffbca4e ".x trunk/macro/run/run_sim_vis.C", sync=false,
  err=0xbffbea8c) at core/base/src/TApplication.cxx:798
#47 0xb6f69835 in TRint::Run (this=0x8100ff8, retrn=false)
  at core/rint/src/TRint.cxx:355
#48 0x08048e09 in main (argc=1, argv=0xbffbeb94) at main/src/rmain.cxx:29
Root >
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Subject: Re: Event Dsisplay
Posted by [Ralf Kliemt](#) on Mon, 16 Mar 2009 18:16:16 GMT
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Hello Christian,

Depending on what you want to see, you should have a look at the eventdisplay.
A sample is macro/mvd/Tracking/eventDisplay.C.
Be sure to switch on the storage of trajectories in the simulation if you want to see the MC tracks.

For the geometry visualisation I recommond to set the vis level in the gui to 10. Seeing an event works by selecting the eventmanager object and increasing the event number in the info tab.

Kind regards, Ralf.
