```
[G4] ===================================
[G4] G4EventManager::ProcessOneEvent()
[G4] ===================================
[G4] 1 primaries are passed from G4EventTransformer
[G4] !!!!!!! Now start processing an event !!!!!!!
[G4]
[G4] *********************************************************************************
[G4] * G4Track Information: Particle = e+, Track ID = 1, Parent ID = 0
[G4] *********************************************************************************
[G4]
[G4] Step#   X(mm)     Y(mm)     Z(mm)    KinE(MeV)  dE(MeV)  StepLeng  TrackLeng  NextVolume          ProcName
[G4]   0    0.00808   -0.0142   0.0188    0.286      0        0         0          pointSource_phys    initStep
[G4]   1    -0.031    0.0498    0.0216    0.269      0.0168   0.0783    0.0783     waterPhantom_phys   Transportation
[G4]   2    -0.105    0.193     -0.00224  0.232      0.0368   0.171     0.249      waterPhantom_phys   MultipleScattering
[G4]   3    -0.101    0.493     -0.0296   0          0.232    0.545     0.794      waterPhantom_phys   ElectronIonisation
[G4]   4    -0.101    0.493     -0.0296   0          0        0         0.794      waterPhantom_phys   annihil
[G4] Track (trackID 1, parentID 0) is processed with stopping code 2
[G4]
[G4] *********************************************************************************
[G4] * G4Track Information: Particle = gamma, Track ID = 3, Parent ID = 1        (this is the first annihilation photon)
[G4] *********************************************************************************
[G4]
[G4] Step#   X(mm)     Y(mm)     Z(mm)    KinE(MeV)  dE(MeV)  StepLeng  TrackLeng  NextVolume          ProcName
[G4]   0    -0.101    0.493     -0.0296   0.509      0        0         0          waterPhantom_phys   initStep
[G4]   1    1.85      0.77      -0.044    0.509      0        1.97      1.97       world_phys          Transportation
[G4]   2    40.9      6.32      -0.333    0.509      0        39.5      41.4       cylindricalPET_phys Transportation
[G4]   3    41.4      6.4       -0.337    0.509      0        0.521     41.9       LSO_phys            Transportation
[G4]   4    42.3      6.53      -0.344    0.287      0        0.923     42.9       LSO_phys            Compton
[G4]   5    42.4      6.53      -0.432    0.164      0        0.0906    43         LSO_phys            Compton
[G4]   6    42.4      6.54      -0.396    0          0.0633   0.067     43         LSO_phys            PhotoElectric
[G4] Track (trackID 3, parentID 1) is processed with stopping code 2
[G4]
[G4] *********************************************************************************
     * G4Track Information: Particle = e-, Track ID = 6, Parent ID = 3
[G4] *********************************************************************************
[G4] Step#   X(mm)     Y(mm)     Z(mm)    KinE(MeV)  dE(MeV)  StepLeng  TrackLeng  NextVolume          ProcName
[G4]   0    42.4      6.54      -0.396    0.101      0        0         0          LSO_phys            initStep
[G4]   1    42.4      6.54      -0.398    0          0.101    0.0344    0.0344     LSO_phys            ElectronIonisation
[G4] Track (trackID 6, parentID 3) is processed with stopping code 2
[G4]
[G4] *********************************************************************************
[G4] * G4Track Information: Particle = e-, Track ID = 5, Parent ID = 3
[G4] *********************************************************************************
[G4] Step#   X(mm)     Y(mm)     Z(mm)    KinE(MeV)  dE(MeV)  StepLeng  TrackLeng  NextVolume          ProcName
[G4]   0    42.4      6.53      -0.432    0.123      0        0         0          LSO_phys            initStep
[G4]   1    42.4      6.53      -0.437    0          0.123    0.0477    0.0477     LSO_phys            ElectronIonisation
[G4] Track (trackID 5, parentID 3) is processed with stopping code 2
[G4]
[G4] *********************************************************************************
[G4] * G4Track Information: Particle = e-, Track ID = 4, Parent ID = 3
[G4] *********************************************************************************
[G4] Step#   X(mm)     Y(mm)     Z(mm)    KinE(MeV)  dE(MeV)  StepLeng  TrackLeng  NextVolume          ProcName
[G4]   0    42.3      6.53      -0.344    0.222      0        0         0          LSO_phys            initStep
[G4]   1    42.3      6.54      -0.328    0.0689     0.105    0.0464    0.0464     LSO_phys            Bremsstrahlung
[G4]   2    42.3      6.54      -0.326    0          0.0689   0.0183    0.0647     LSO_phys            ElectronIonisation
[G4] Track (trackID 4, parentID 3) is processed with stopping code 2
[G4]
[G4] *********************************************************************************
[G4] * G4Track Information: Particle = e-, Track ID = 7, Parent ID = 4
[G4] *********************************************************************************
[G4] Step#   X(mm)     Y(mm)     Z(mm)    KinE(MeV)  dE(MeV)  StepLeng  TrackLeng  NextVolume          ProcName
[G4]   0    42.3      6.54      -0.328    0.0474     0        0         0          LSO_phys            initStep
[G4]   1    42.2      6.43      -0.0169   0          0.0109   0.379     0.379      LSO_phys            PhotoElectric
[G4] Track (trackID 7, parentID 4) is processed with stopping code 2
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[G4]
[G4] **
[G4] * G4Track Information: Particle = e-, Track ID = 8, Parent ID = 7
[G4] **
[G4] Step# X(mm)   Y(mm)   Z(mm)   KinE(MeV)   dE(MeV)   StepLeng   TrackLeng   NextVolume   ProcName

Step#	X(mm)	Y(mm)	Z(mm)	KinE(MeV)	dE(MeV)	StepLeng	TrackLeng	NextVolume	ProcName
0	42.2	6.43	-0.0169	0.0365	0	0	0	LSO_phys	initStep
1	42.2	6.43	-0.0164	0	0.0365	0.00628	0.00628	LSO_phys	ElectronIonisation

[G4] Track (trackID 8, parentID 7) is processed with stopping code 2
[G4]
[G4] **
[G4] * G4Track Information: Particle = gamma, Track ID = 2, Parent ID = 1   (this is the second annihilation photon)
[G4] **
[G4] Step# X(mm)   Y(mm)   Z(mm)   KinE(MeV)   dE(MeV)   StepLeng   TrackLeng   NextVolume   ProcName

Step#	X(mm)	Y(mm)	Z(mm)	KinE(MeV)	dE(MeV)	StepLeng	TrackLeng	NextVolume	ProcName
0	-0.101	0.493	-0.0296	0.513	0	0	0	waterPhantom_phys	initStep
1	-1.99	0.21	-0.0178	0.513	0	1.91	1.91	world_phys	Transportation
2	-41	-5.65	0.226	0.513	0	39.5	41.4	cylindricalPET_phys	Transportation
3	-41.4	-5.71	0.229	0.513	0	0.422	41.8	LSO_phys	Transportation
4	-48	-6.69	0.27	0.513	0	6.61	48.4	box2_phys	Transportation
5	-48.5	-6.77	0.273	0.513	0	0.539	48.9	LSO_phys	Transportation
6	-49	-6.85	0.276	0	0.0633	0.548	49.5	LSO_phys	PhotoElectric

[G4] Track (trackID 2, parentID 1) is processed with stopping code 2
[G4]
[G4] **
[G4] * G4Track Information: Particle = e-, Track ID = 9, Parent ID = 2
[G4] **
[G4] Step# X(mm)   Y(mm)   Z(mm)   KinE(MeV)   dE(MeV)   StepLeng   TrackLeng   NextVolume   ProcName

Step#	X(mm)	Y(mm)	Z(mm)	KinE(MeV)	dE(MeV)	StepLeng	TrackLeng	NextVolume	ProcName
0	-49	-6.85	0.276	0.45	0	0	0	LSO_phys	initStep
1	-49	-6.85	0.278	0.331	0.00218	0.00537	0.00537	LSO_phys	Bremsstrahlung
2	-49.1	-6.87	0.287	0	0.331	0.22	0.226	LSO_phys	ElectronIonisation

[G4] Track (trackID 9, parentID 2) is processed with stopping code 2
[G4]
[G4] **
[G4] * G4Track Information: Particle = gamma, Track ID = 10, Parent ID = 9
[G4] **
[G4] Step# X(mm)   Y(mm)   Z(mm)   KinE(MeV)   dE(MeV)   StepLeng   TrackLeng   NextVolume   ProcName

Step#	X(mm)	Y(mm)	Z(mm)	KinE(MeV)	dE(MeV)	StepLeng	TrackLeng	NextVolume	ProcName
0	-49	-6.85	0.278	0.116	0	0	0	LSO_phys	initStep
1	-48.9	-7.43	0.478	0	0.0633	0.632	0.632	LSO_phys	PhotoElectric

[G4] Track (trackID 10, parentID 9) is processed with stopping code 2
[G4]
[G4] **
[G4] * G4Track Information: Particle = e-, Track ID = 11, Parent ID = 10
[G4] **
[G4] Step# X(mm)   Y(mm)   Z(mm)   KinE(MeV)   dE(MeV)   StepLeng   TrackLeng   NextVolume   ProcName

Step#	X(mm)	Y(mm)	Z(mm)	KinE(MeV)	dE(MeV)	StepLeng	TrackLeng	NextVolume	ProcName
0	-48.9	-7.43	0.478	0.0529	0	0	0	LSO_phys	initStep
1	-48.9	-7.43	0.479	0	0.0529	0.0117	0.0117	LSO_phys	ElectronIonisation

[G4] Track (trackID 11, parentID 10) is processed with stopping code 2
[G4] NULL returned from G4StackManager
[G4] Terminate current event processing