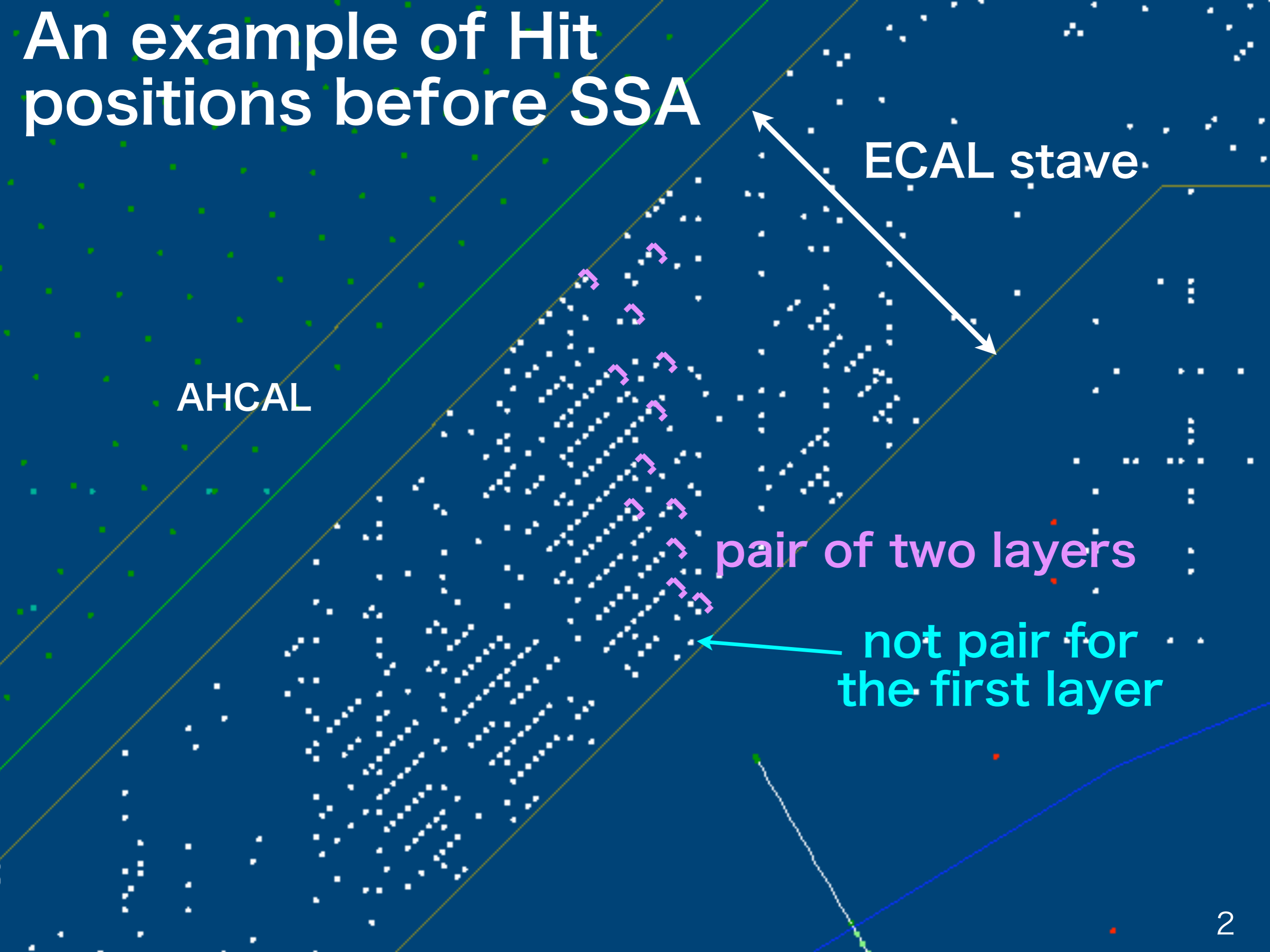


Strip-ScECAL reconstruction

2nd December, 2011 Physics Software
meeting of ILD Asia

Shinshu university k. koteru

An example of Hit positions before SSA



AHCAL

ECAL stave

pair of two layers

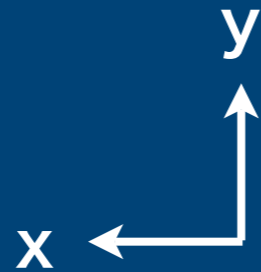
not pair for the first layer

PreShowerCollection is read out

500 GeV muon+ going through top stave of ScECAL barrel

Before SSA

PreShower=
1st layer



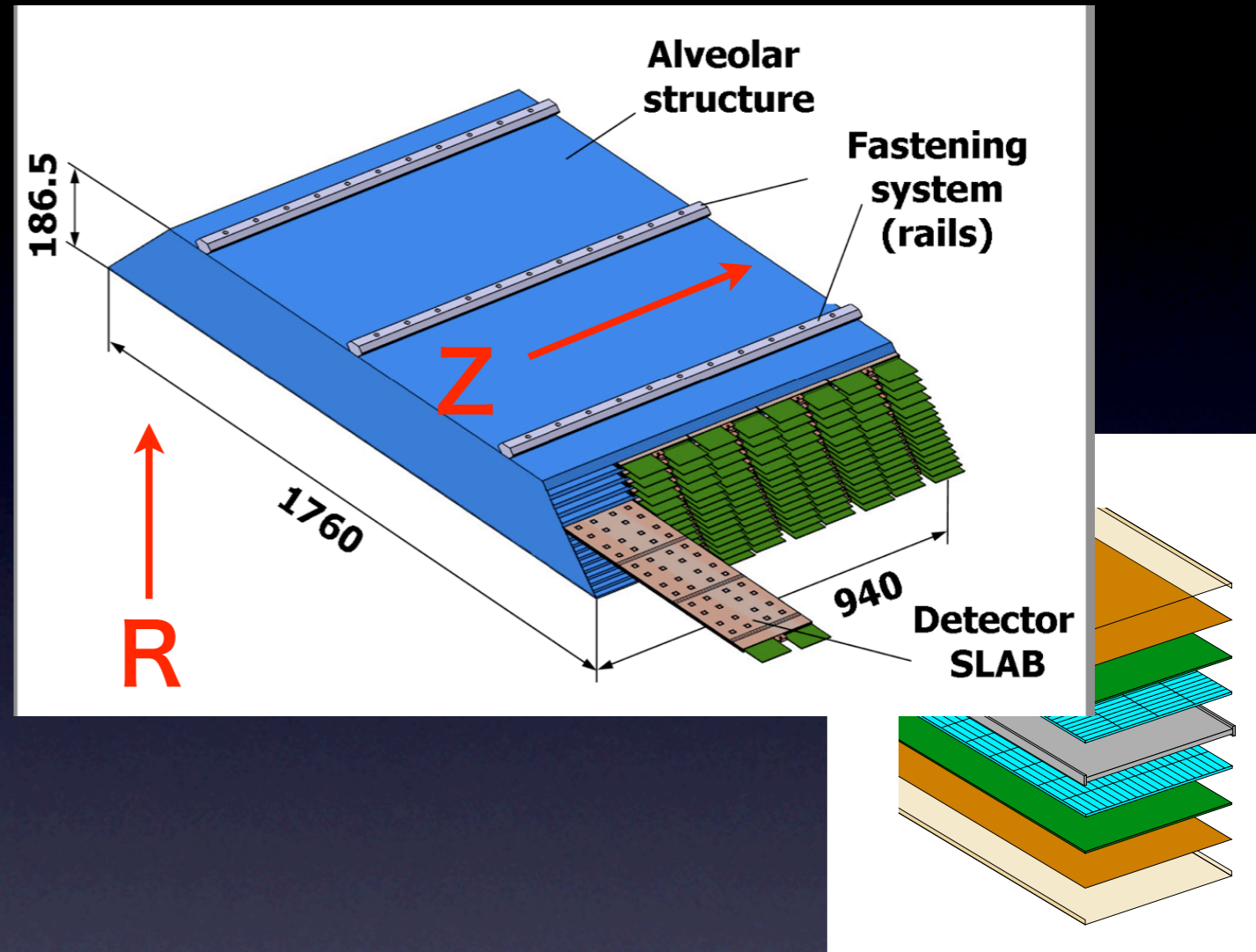
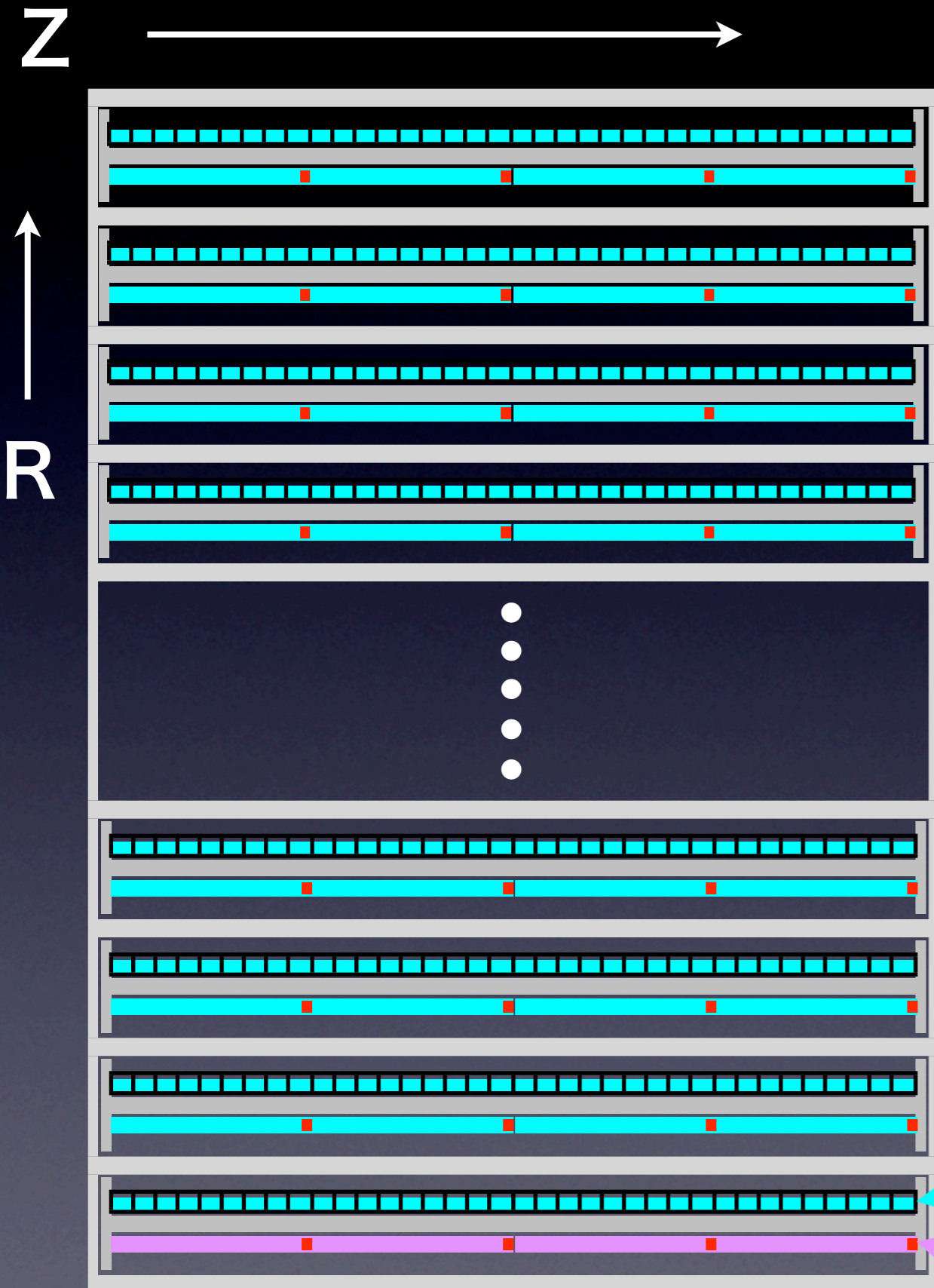
After SSA

PreShower=
1st layer

- Still CellIDs are wrong, but algorithm is not affected.
- I started reanalysis of Jet etc.

Backup

In an alveolar



Daniel gave me information that the first layer is also paired with the next one, but the collection name for the first layer is different than others.

EcalBarreScintillatorTransverseStrip

EcalBarreScintillatorLongitudinal
-StripsPreShowerCollection

Bug in ?

I found how to read PreShower Collection by MarlinReco. However, ...

collection name : EcalBarrelScintillatorLongitudinalStripsPreShowerCollection

parameters:

This should be real first layer

```
[00000188] | 00308b23 | 00000000 | 3.426e-04 | (5.224e+02,-1.848e+03,3.854e+01) | 1
id-fields: (M:3,S-1:4,I:44,J:97,K-1:0)
-> -13: 0.000342596 | 6.42 | no PDG
```

Similar cell ID, especially the same layer number for different position

collection name : EcalBarrelScintillatorTransverseStrips

parameters:

This should be started from 2nd layer

```
[ id ] | cellId0 | cellId1 | energy | position (x,y,z) | nMCParticles
-> MC contribution: prim. PDG | energy | time | sec. PDG
```

```
[00000189] | 00308b23 | 00000000 | 2.948e-04 | (5.224e+02,-1.853e+03,3.860e+01) | 1
id-fields: (M:3,S-1:4,I:44,J:97,K-1:0)
-> -13: 0.000294848 | 6.43834 | no PDG
```

```
[0000018a] | 02308a63 | 00000000 | 3.119e-04 | (5.235e+02,-1.867e+03,3.860e+01) | 1
id-fields: (M:3,S-1:4,I:41,J:97,K-1:2)
```

```
-> -13: 0.000311884 | 6.48689 | no PDG
```

```
[0000018b] | 04308963 | 00000000 | 7.613e-04 | (5.298e+02,-1.882e+03,3.860e+01) | 1
id-fields: (M:3,S-1:4,I:37,J:97,K-1:4)
```

```
-> -13: 0.000761334 | 6.53545 | no PDG
```