Turbo++

Turbo++ consists of the persisted reconstruction from the HLT. Please see the following presentation for more details:
https://indico.cern.ch/event/468306/contribution/2/attachments/1224690/1792222/TurboReprocessing.pdf (8 Feb 2016).

HLT configuration

Trigger lines use the "PersistReco" flag in the following way:

```
line = Hlt2Line(name
,prescale=self.prescale
,postscale=self.postscale
,algos=algoList
,Turbo=True
,PersistReco=True
)
```

This will enable the placing of the reconstruction containers into the raw bank, that will allow the event to look the same as the Brunel output (i.e. with all Tracks and ProtoParticles from the event available).

DaVinci usage

To the analyst, the following lines are necessary to inform DaVinci you wish to use the online reconstruction:

- 2015 reprocessing

```
from Configurables import DstConf, TurboConf
DstConf().Turbo = True
TurboConf().PersistReco = True
```

- 2016 data (DaVinci >= v40r1)

```
from Configurables import DstConf, TurboConf
DstConf().Turbo = True
TurboConf().PersistReco = True
```

This will behind the scenes make the online reconstruction ProtoParticles available in the usual locations. This means that usual standard particles will work, i.e.

```
from StandardParticles import StdAllNoPIDsPions
```

will make particles as you expect them to.

-- RosenMatev - 2016-04-23

This topic: LHCb > TurboPlusPlus
Topic revision: r4 - 2016-07-12 - SeanBenson