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UpgradeMonteCarloSamples

This page is to collect information regarding Upgrade MC for trigger development

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- Conditions
- Scripts
- Datasets
- Requests

Conditions

The monte-carlo has been produced using conddb and dddb tags:

- DDDB: dddb-20150702
- Condition DB: sim-20150716-vc-mu100
- CondDB().Upgrade = True

So the following job options are needed:

```python
daVinci().Simulation = True
daVinci().DataType = "Upgrade"
daVinci().InputType = 'LDST'
from Configurables import CondDB
condDB().Upgrade = True
daVinci().CondDBtag = "sim-20150716-vc-mu100"
daVinci().DDDBtag = "dddb-20150702"
```

As the trigger has not yet been run on these samples, the following settings are helpful:

```python
from Configurables import L0Conf
l0Conf().EnsureKnownTCK=False
```

Scripts

Some minimal scripts to run over these MC samples to produce ntuples can be found here:

https://gitlab.cern.ch/mwhitehe/upgrade_trigger_scripts

Datasets

- The samples can be found at the following path:
  sim://MC/Upgrade/Beam7000GeV-Upgrade-MagUp-Nu7.6-25ns-Pythia8/Sim08h-NoRichSpill/Reco15U3/ReconstructibleFiltered
(see the book-keeping: https://lhcb-web-dirac.cern.ch/DIRAC/LHCb-Production/lhcb_user/Data/BK/display)

  - MC reconstrucable filtered signal samples:

<table>
<thead>
<tr>
<th>Event type</th>
<th>Channel</th>
<th>Approx Filter efficiency</th>
<th>Nevts post-filter</th>
<th>WG</th>
<th>StrippingLines</th>
</tr>
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<tbody>
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<td>B2CC</td>
<td>StrippingFullDSTDiMuonJpsi2MuMuDetachedLine</td>
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<td>CPU Time</td>
<td>Control Region</td>
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Unfiltered cocktail samples for BG/rate estimations

<table>
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<tr>
<th>Event type</th>
<th>Channel</th>
<th>Nevts (unfiltered)</th>
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<tr>
<td>10000000</td>
<td>Inclusive bb</td>
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</tr>
<tr>
<td>20000000</td>
<td>Inclusive cc</td>
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</tr>
<tr>
<td>30000000</td>
<td>Minbias</td>
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**Requests**

New samples requested as of April 2016 are listed below

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<thead>
<tr>
<th>Event type</th>
<th>Channel</th>
<th>Nevts post-filter</th>
<th>Working group</th>
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<tbody>
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<td>D2pimumumu</td>
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<tr>
<td>11574001</td>
<td>B2Dstaunu_tau2mununu</td>
<td>100000</td>
<td>Semileptonic</td>
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</table>

-- ConorFitzpatrick - 2015-08-25