

Instructions on how to run SIM on private samples

Using the command `GetTfCommand.py` (need to setup Athena first), we can get what are the parameters for the `Sim_tf` used in the default DC14 for RunII production

Getting the command for the tag `s1982`, used in the signal samples according to slide 4 in <https://indico.cern.ch/event/291043/contribution/3/material/slides/0.pdf>

lxplus0147:~> `GetTfCommand.py --AMI s1982`

```
PyJobTransforms.<module> 2014-07-30 14:44:39,205 INFO logging set in /afs/cern.ch/atlas/software/builds/nightlies/17.7.X.Y/AtlasProduction/latest_copied_release/InstallArea/share/bin/GetTfCommand.py
PyJobTransforms.trfAMI.getProdSysTagsCharacters 2014-07-30 14:44:42,181 WARNING Getting ProdSysTags from primary AMI failed. Trying CERN replica.
PyJobTransforms.trfAMI.getProdSysTagsCharacters 2014-07-30 14:44:42,611 WARNING Getting ProdSysTags from CERN replica failed.
PyJobTransforms.trfAMI.getProdSysTagsCharacters 2014-07-30 14:44:42,611 WARNING Returning default list of ProdSysTags.
```

Information about tag `s1982`:

This is a ProdSys tag. Input and output file arguments are likely to be missing because they are often not part of the tag definition.

This tag consists of 1 transform command(s).

Transform commands follow below.

Input and output file names (if present) are only suggestions.

`asetup 17.7.3.9.6`

```
Sim_tf.py --DataRunNumber='222222' --preInclude='EVNTtoHITS:SimulationJobOptions/preInclude.BeamPipeKill.py SimulationJobOptions/preInclude.FrozenShowersFCalOnly.py' --physicsList='FTFP_BERT' --geometryVersion='ATLAS-R2-2015-01-01-00_VALIDATION' --conditionsTag='OFLCOND-RUN12-SDR-01' --enableLooperKiller='True' --postInclude='RecJobTransforms/UseFrontier.py' --useISF='True' --DBRelease='current' --simulator='MC12G4' --ignorePatterns='ToolSvc.ISFG4.+ERROR\s+ISF_to_G4Event.+article.conversion.failed'
```

Input file arguments:

Output file arguments:

```
--outputTrackRecordFile='myTrackRecord'
```

Possible output data types: ['HITS']

Now giving appropriate paths to the input files Steve L. created and names to the output hits file, the command used for simulation of the first test samples was:

`~sllloyd/public/forEdExotics/`

```
Sim_tf.py --DataRunNumber='222222' --preInclude='EVNTtoHITS:SimulationJobOptions/preInclude.BeamPipeKill.py,SimulationJobOptions/preInclude.FrozenShowersFCalOnly.py' --physicsList='FTFP_BERT' --geometryVersion='ATLAS-R2-2015-01-01-00_VALIDATION' --conditionsTag='OFLCOND-RUN12-SDR-01' --enableLooperKiller='True' --
```

F.A. Dias - July 31th, 2014

```
postInclude='RecJobTransforms/UseFrontier.py' --useISF='True' --DBRelease='current' --  
simulator='MC12G4' --ignorePatterns='ToolSvc.ISFG4.+ERROR\s+ISF_to_G4Event.  
+article.conversion.failed' --outputHitsFile "Hits.pool.root" --inputEvgenFile mc12_13TeV.  
182827.Pythia8_AU2MSTW2008LO_Wprime_WZ_llqq_m2000.evgen.EVNT.e2493.pool.root
```

But because this takes a very long time --> script to submit several jobs on lxbatch

Results are on EOS (HITS files):

/eos/atlas/user/f/fladidas/EXOTICS/TestSamples_July2014/hits