The MuonDigitizer OO code

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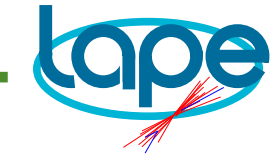
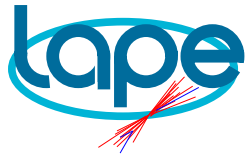
- The code runs for all Gaudi versions reading in the RawHits from a DST (using the SICb converter).
- It digitizes the hits and produce the PadHits acording to a given chamber/pad configuration.
- All the geometry information is read in from a XML file (chamber dimensions, pad configuration, etc.).

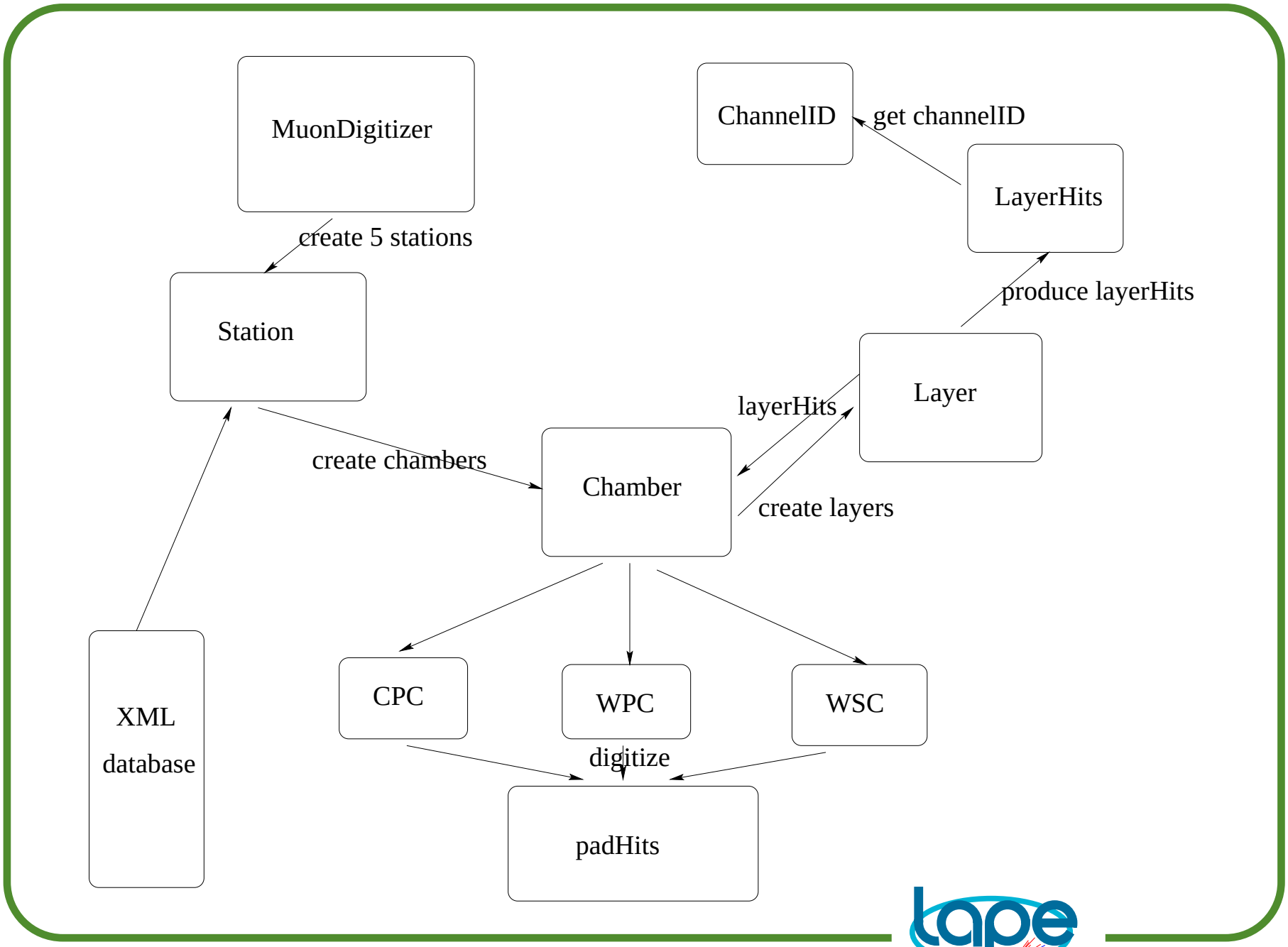


✔ The MuonDigitizer Code

- **MuonDigitizer:**
  - create 5 Stations
  - configure the Stations
  - read in the MCHits and distribute them to the Stations
  - stations $\rightarrow$ digitize
- **Station:**
  - create its Chambers
  - set the Chambers' technology,ID,ZPosition,Inner and Outer Dimensions
  - distribute the MCHits for its Chambers
  - chambers $\rightarrow$ digitize



- **Chamber:**
  - **Virtual Class. The concrete objects are CPC's, WPC's and WSC's**
  - **create its Layers**
- **Layer:**
  - **produce layerHits (pad ID, xyz of the pad center)**
- **CPC,WPC or WSC:**
  - **receive the layerHits and produce the padHits (the actual digitization is done here)**
  - **if both layers are hit in the same pad, we keep one of them, otherwise, we keep both pads.**


MuonDigitizer
ChannelID
get channelID
LayerHits
create 5 stations
Station
produce layerHits
Layer
layerHits
create chambers
Chamber
create layers
XML
database
CPC
WPC
WSC
digitize
padHits