

# Event Data Model

## Proposal for a 2<sup>nd</sup> iteration based on LCIO

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Thanks to Frank Gaede for LCIO

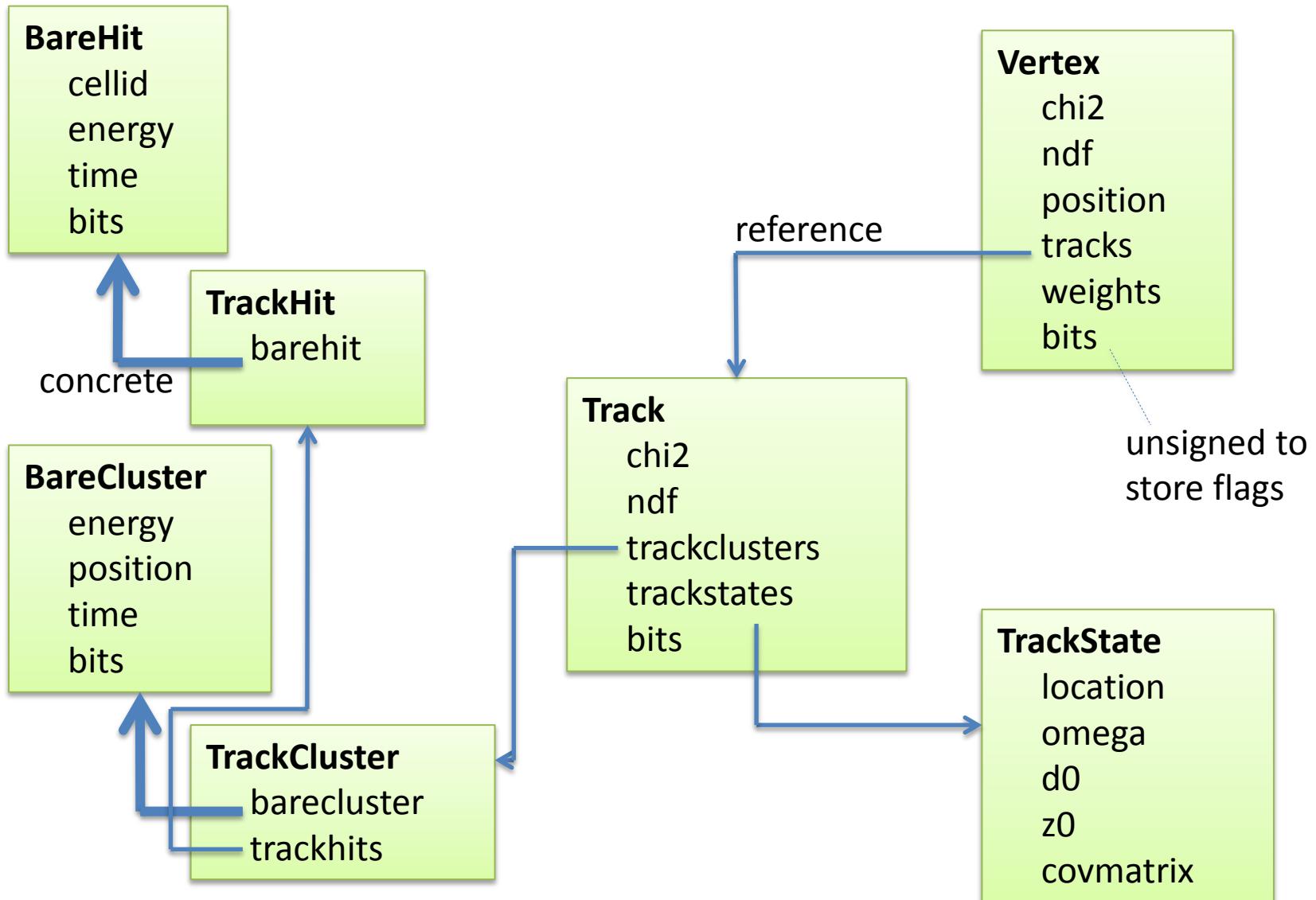
# LCIO

- Event data model and I/O layer for the linear collider experiments
  - [http://lcio.desy.de/v02-04-03/doc/doxygen\\_api/html/namespaces.html](http://lcio.desy.de/v02-04-03/doc/doxygen_api/html/namespaces.html)
- Simple, complete, and used by many people  
→ a very good starting point

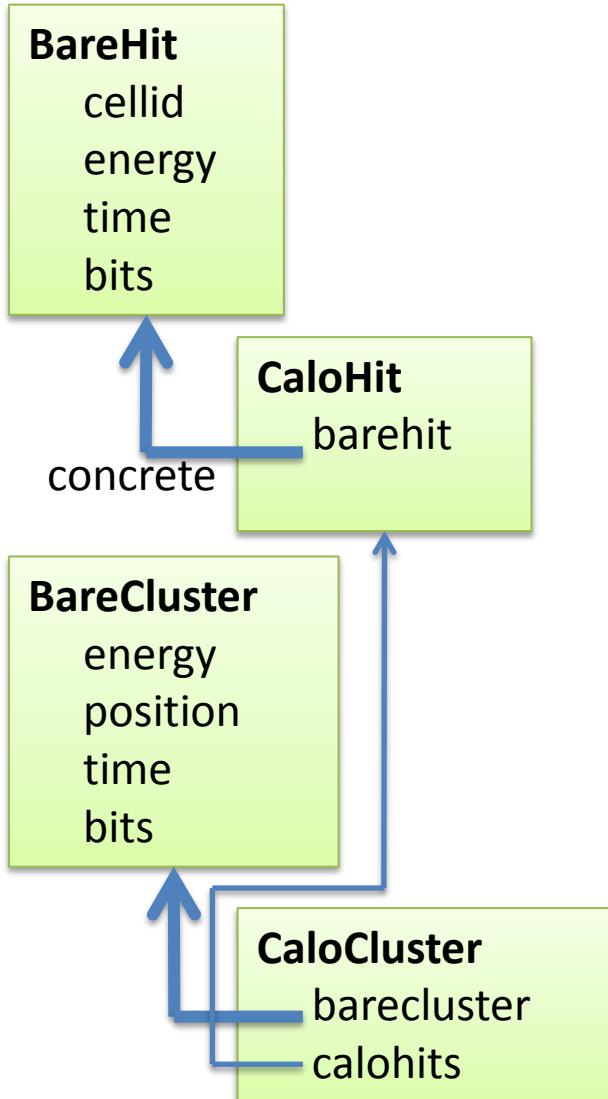
# Conditions

- Need to adapt to our POD design choice
  - POD == struct
  - PODs can only contain other PODs
- Need to adopt a pragmatic approach
  - only port what we need now
  - will port more later upon request
- Geometry information not stored in data model

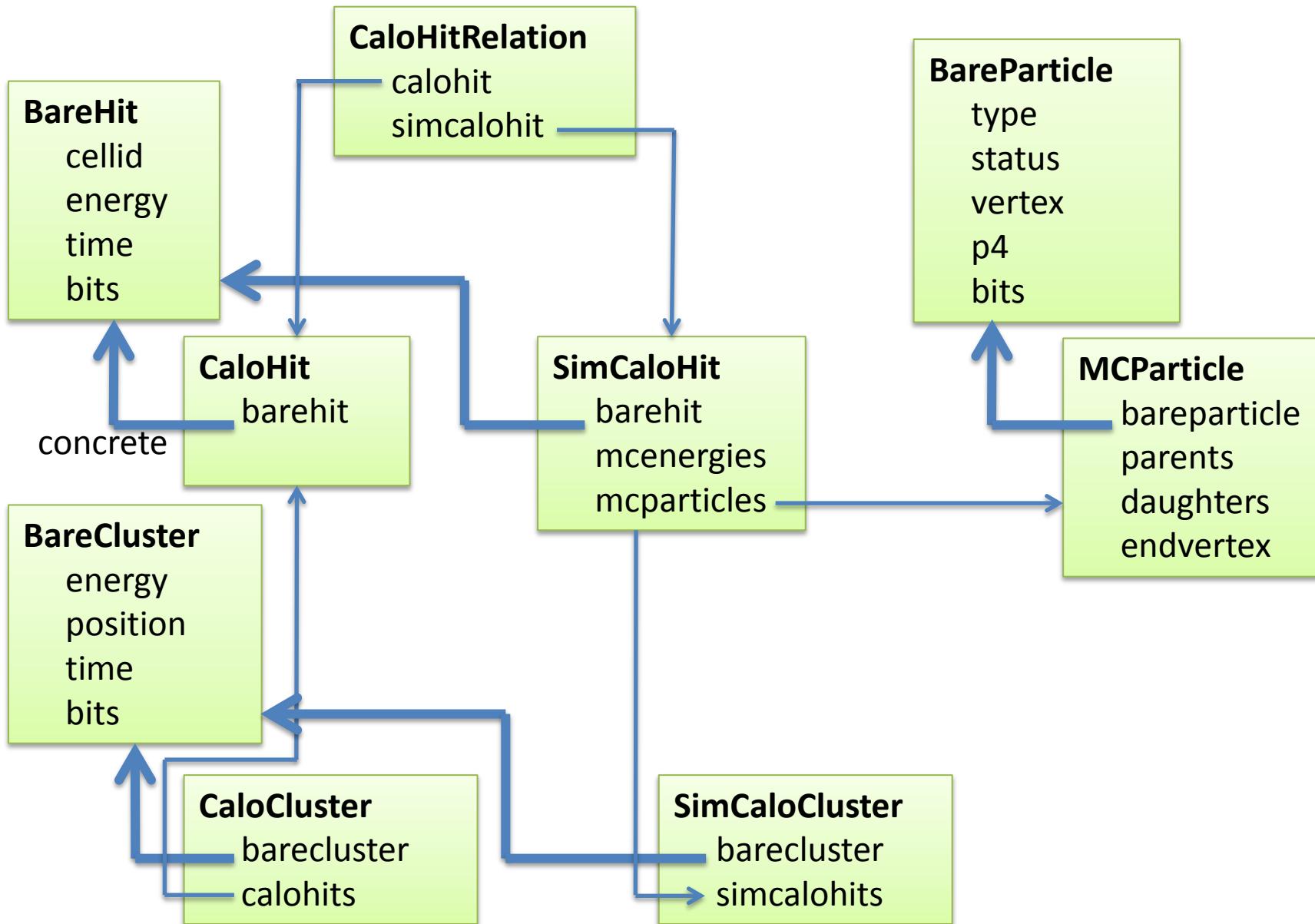
# The track sector



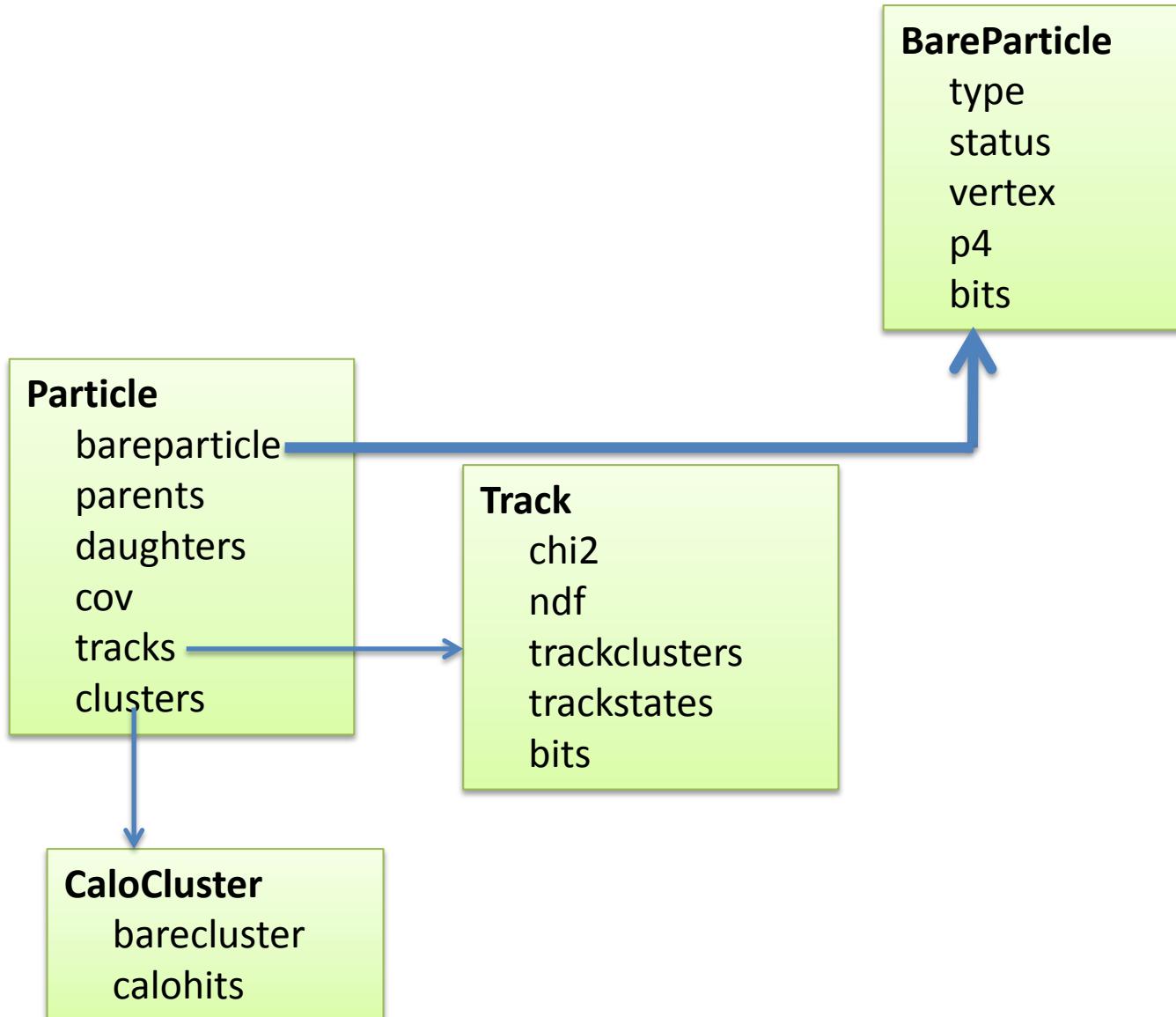
# The calorimeter sector



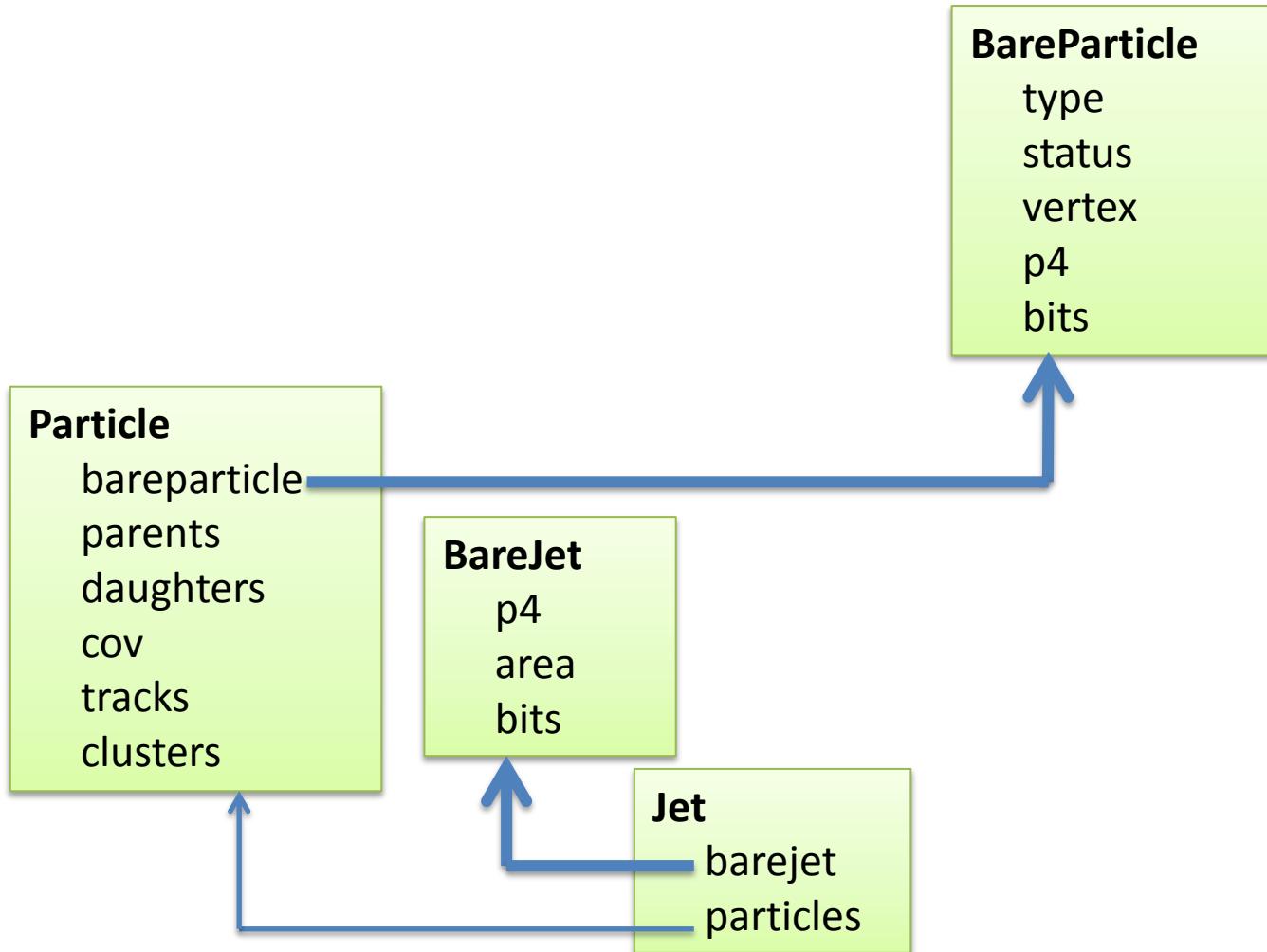
# The calorimeter sector (sim and rec)



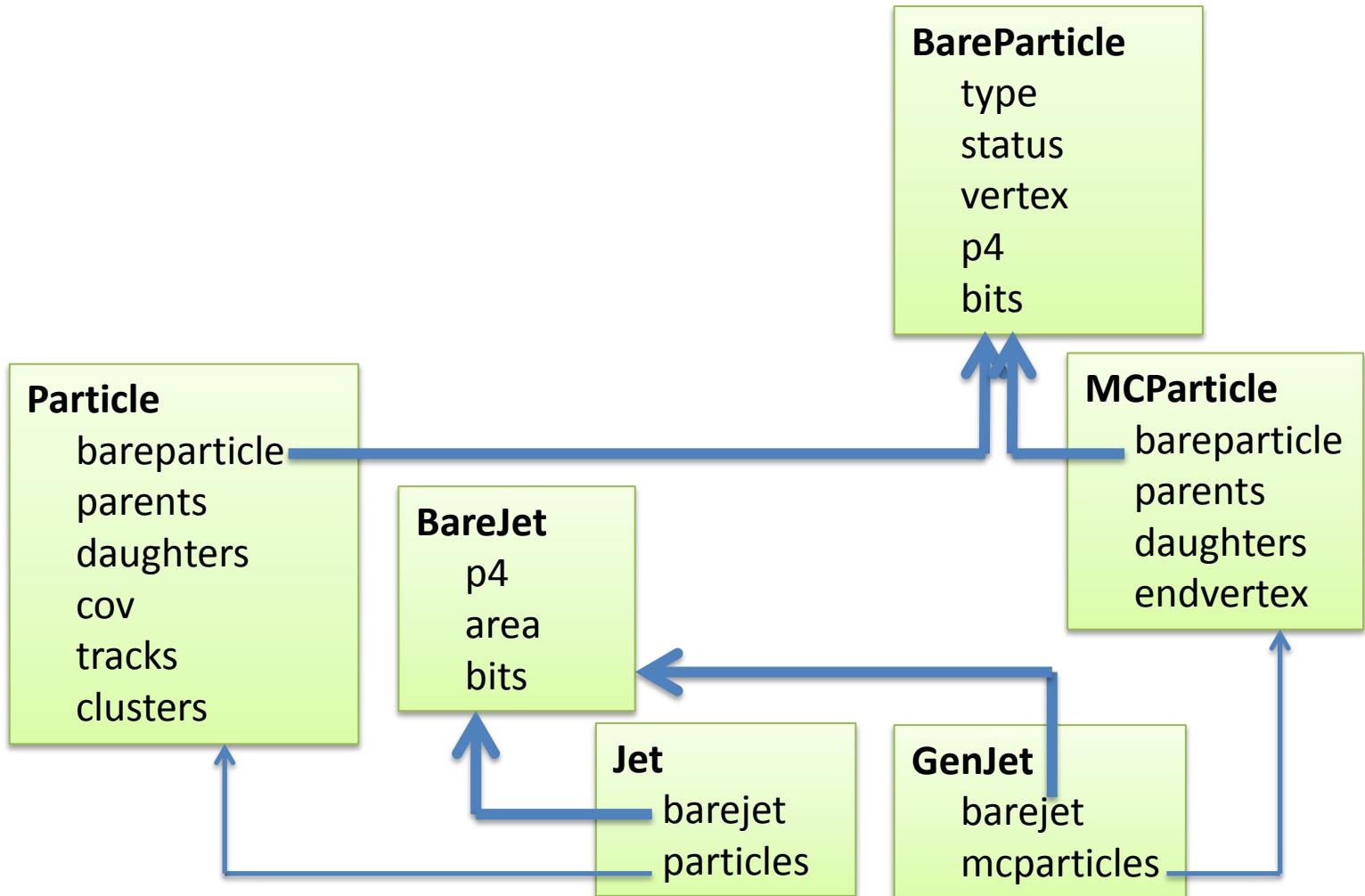
# The particle sector



# The jet sector

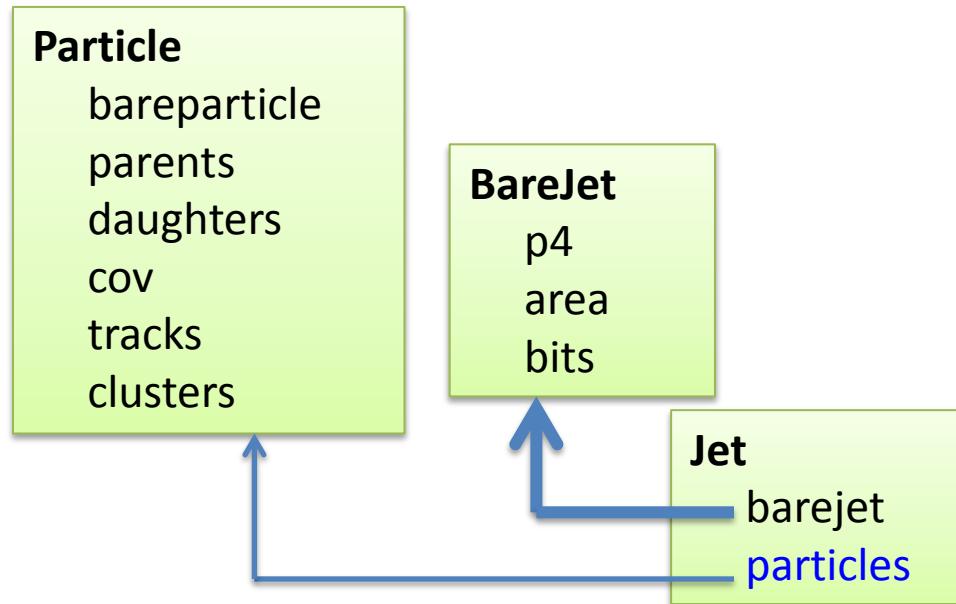


# The jet sector (sim and rec)



# Estimated Time of Achievement

- 2 days, but small showstoppers
  - Need a way to have associations between 1 object and n (arbitrary) other objects
    - Cannot store in PODs  
→ external associations
    - What we do now is suboptimal
  - Optimal solution under development (Benedikt)



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