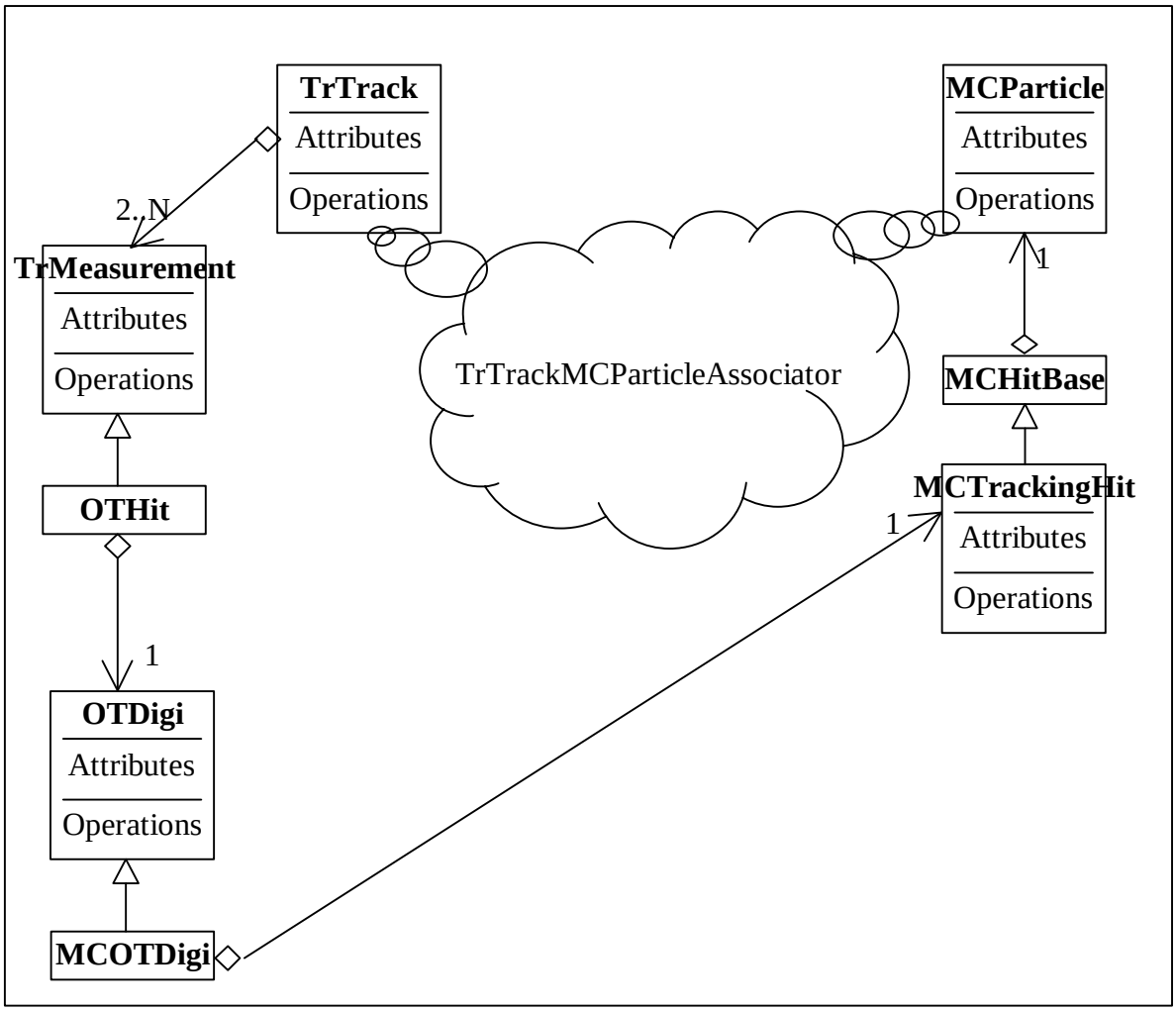
Event Data Model

Generic relationship between reconstructed data and MC Hits

- Navigation always via associator
- Data model could be optimised later by introduction of additional navigation classes
  - Transparent to applications



Spillover events

- **Definitions:**
  - **Pileup: several events from same beam crossing**
    - Combination done by simply adding MC Hits of underlying events to the physics event
    - Requires no changes to digitisation code
    - Implemented in both Brunel and SICB
  - **Spillover: events from previous or subsequent beam crossing**
    - Combination must preserve 25ns timing offset
    - Digitisation must know what to do with hits that are 25nd early/late
      - Sub-detector specific
    - Not implemented in SICB or Brunel
      - I/O for additional events trivial with Gaudi
      - Sub-detector digitisation code must be rewritten (if spillover is relevant)

Spillover events in Gaudi