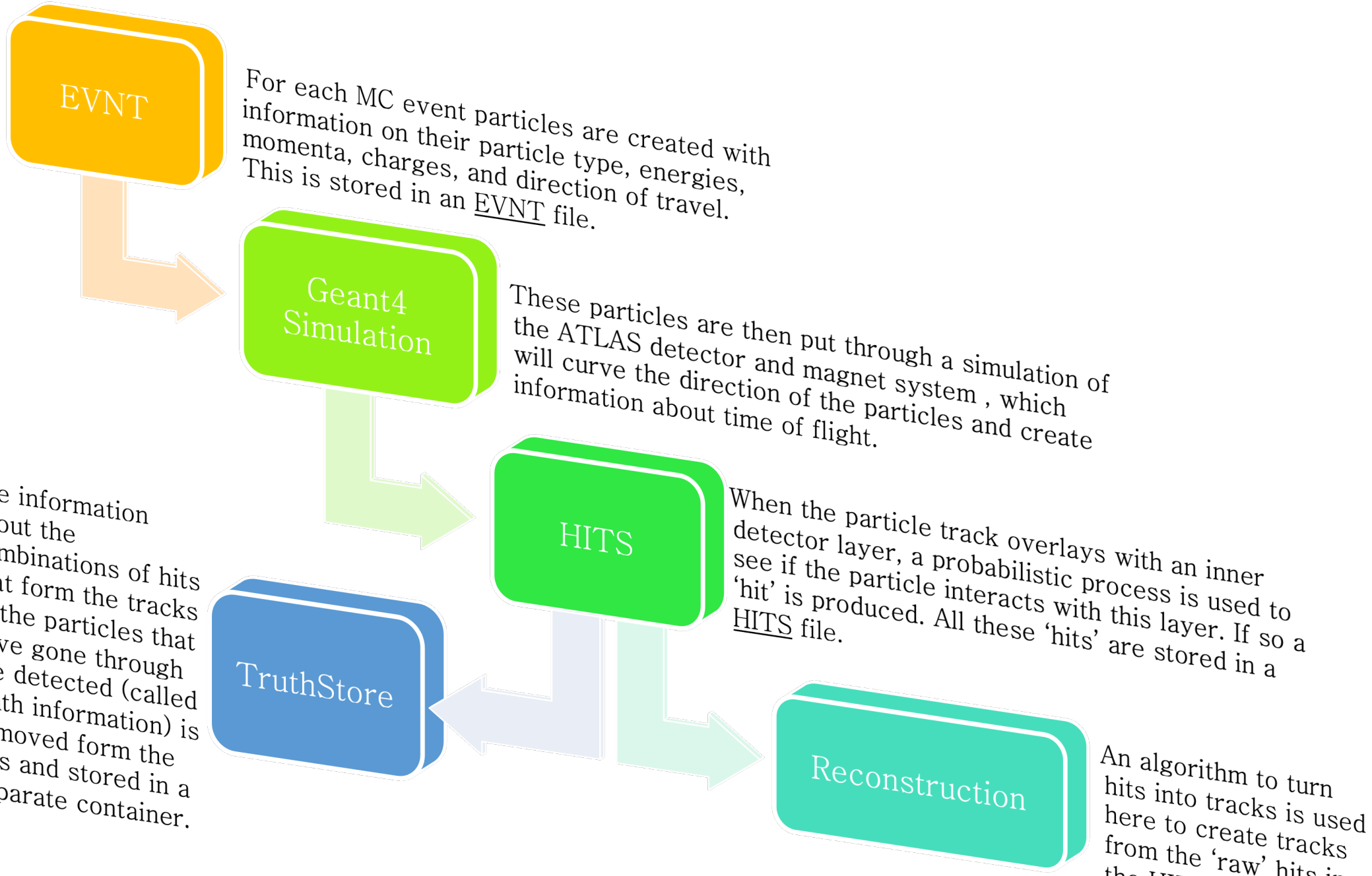
EVNT
For each MC event particles are created with information on their particle type, energies, momenta, charges, and direction of travel. This is stored in an EVNT file.
Geant4 Simulation
These particles are then put through a simulation of the ATLAS detector and magnet system , which will curve the direction of the particles and create information about time of flight.
HITS
When the particle track overlays with an inner detector layer, a probabilistic process is used to see if the particle interacts with this layer. If so a 'hit' is produced. All these 'hits' are stored in a HITS file.
TruthStore
The information about the combinations of hits that form the tracks of the particles that have gone through the detected (called truth information) is removed form the hits and stored in a separate container.
Reconstruction
An algorithm to turn hits into tracks is used here to create tracks from the 'raw' hits in the HITS file.