## LuCaS and LCIO integration

- LCEventAction class registered with Geant4 G4RunManager to add user action for event processing.
- LCEventAction::EndOfEventAction(...)
  - Retrieve collections of hits generated in sensitive detectors as G4THitsCollection<LCHit>.
  - LCHit is a class derived from G4VHit to store and handle LumiCal hits information.
  - Depending on the settings from the configuration file it calls different methods of LCRootOut class to save data in output file.
    - LCRootOut::ProcessEvent ( hit\_collections ); // TTree
    - LCRootOut::ProcEventAccumulate ( hit\_collections );
    - LCIO output can be added as a method to this class. Additional parameter can be implemented in Setup and configuration file.