

# Software Coordinators Report

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ILD Phone Meeting, Jan 16, 2019

- Generator
- (Simulation)
- Reconstruction
- Monte Carlo Production

- next Whizard release planned for Jan 21.
- KB verified that W/Z peaks are visible in 6f samples w/ ISR
  - “resonance history option”
- remaining issue:
  - re-weighting of events (e.g. for BSM) does not work
  - reading in already created files and computing new weights
  - currently breaks resonance history
- under investigation by Whizard authors

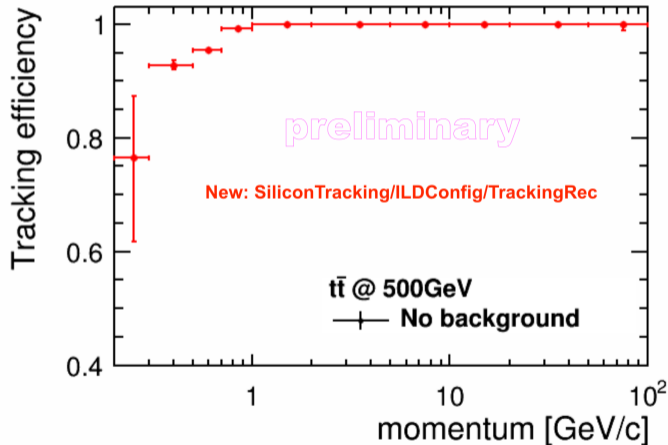
## General To Do

- validation of Whizard w/ LCIO format for planned 250 GeV production
- eventually create *production release*

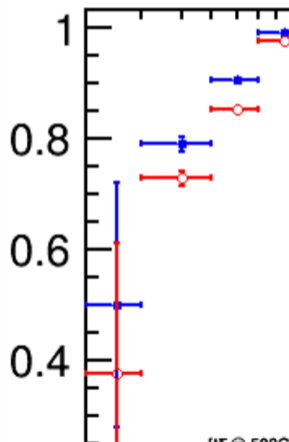
- started to re-investigating Perfect PFA/jet clustering studies for IDR
- working on calibration for ILD\_Is5\_v03 options with **scintillator Ecal**
  - in contact w/ D.Jeans
- continue work on *parallel Marlin*
  - developing a 'thread safe' version of LCIO
  - SIO layer fully re-written - to be included in LCIO
- issue in TrueJet (reported by J.Beyer):
  - different JES for first and last jet
  - issue in assign RecoParticles to MCParticles
  - fixed by JB and M.Berggren independently
    - currently under validation which one to use

- improved SiTrackingProcessor
  - improved update of seed triplets
    - include neighbour bins in next layer
  - improved merging of track segments
    - add hits individually
- improved steering file:
  - add additional seed-triplet search combinations
- observe **improved tracking efficiency**
- SL will give detailed report *next week*

## ILD tracking performance studies: momentum



Old: SiliconTracking  
ILDConfig/production





- 100 BX pair bg @ 250 GeV have been simulated
  - large and small model
  - with and without anti-DID
  - to be used for further bg-studies
- 100 BX pair bg @ 500 GeV have been simulated
  - large model with anti-DID
  - to be used for tracking performance studies
- all files are
  - visible in ILCDirac catalogue
  - and on eLog page

<https://ild.ngt.ndu.ac.jp/elog>