

# Update on Global Reconstruction with GENFIT

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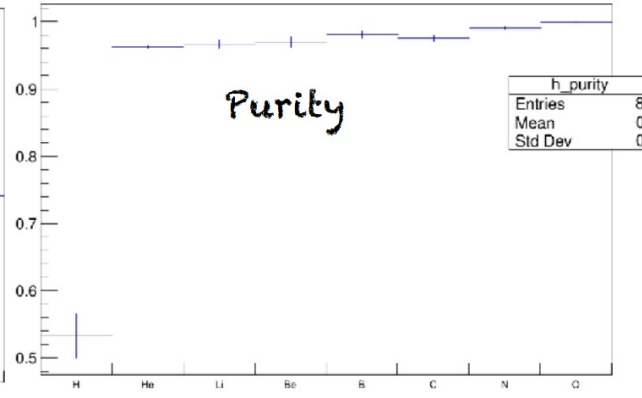
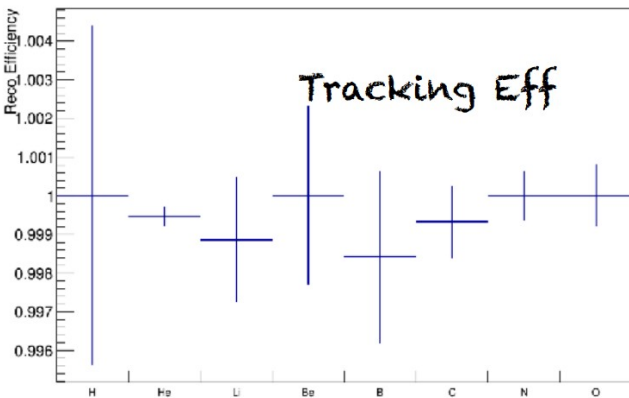
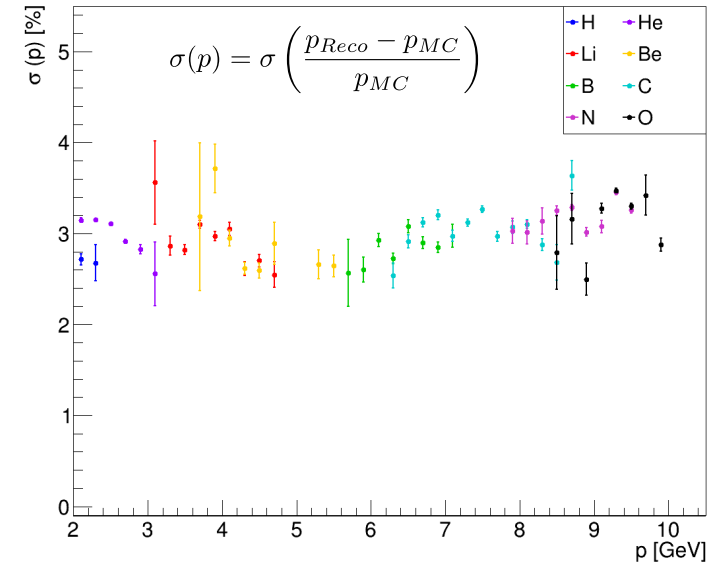
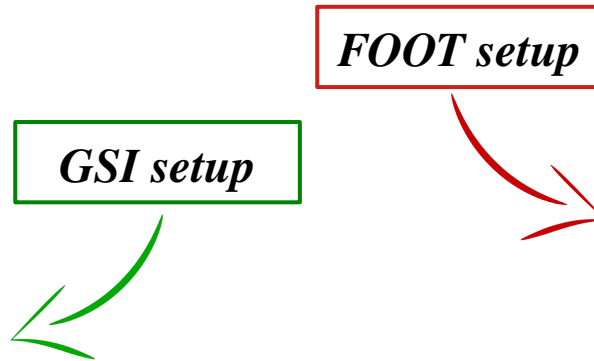
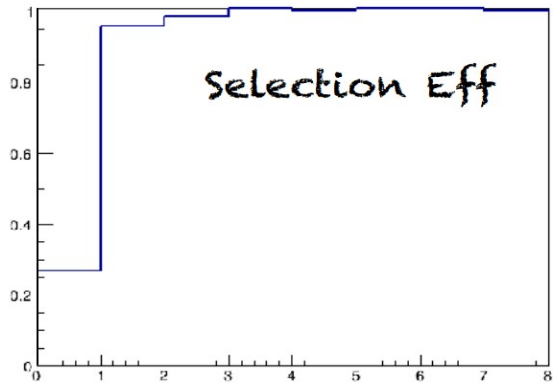
FOOT Software meeting

14/10/2021



# Where we were...

## “Data-like” algorithm tested on MC

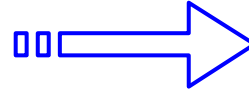


- Very good performances
- 2 algorithms for “linear” tracking



# Where we are now

“Linear” tracking applied to GSI data



Algorithm worked!!

(no segfaults 🤗)

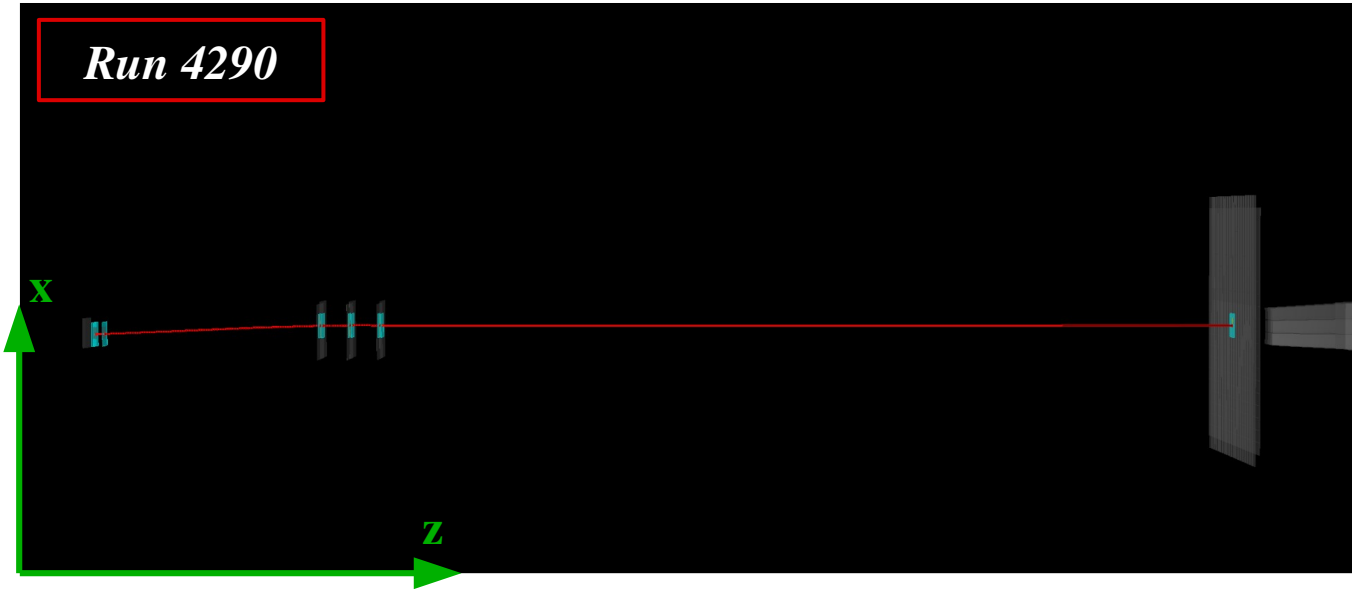
- ✓ We can run on MC and data
- ✓ Track finding OK

**Caveat: No TW calibration!**  
Hit position w/ bar crossing

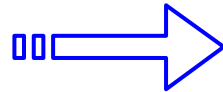


# To do list: Alignment

*Run 4290*



**Caveat: Alignment still ongoing**



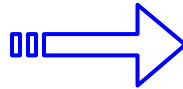
- MB run: mostly primaries
- VT and MSD tracks don't seem parallel (tilt?)



# To do list: VT pile-up

*Run 4306*

**Caveat: VT pile-up**



- “Parallel” tracks in the VT
- Not recognized by our algorithm
- More reconstructed tracks



# Conclusions and Future

GENFIT GlobalReco works on data!

- ✓ Ready to run once calibration and alignment are completed
- ✓ Output container “TAGntuGlbTrack” already in master branch

To do list *(as soon as I'm done w/ TW calibration)*:

- 💡 **Agree w/ TOE and analysis teams on output format!!!**
- 💡 Backward tracking algorithm (TW→VT)
- 💡 Closure test w/ misaligned setup in MC
- 💡 Optimization



*Thank you for  
your attention*

