

# Software status and future developments

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on behalf of the Computing Team



RD\_MUCOLL - Annual meeting  
December 4th, 2024

# The starting point

## Release v02\_09 → July 2024

- Porting to ACTs v32
- Based on spack and key4hep-spack
- Gaudi 38.2

# MuSIC v02

Use branch: **music10Tev**

[ACTSTracking](#) Add support for MuSIC v2

[DDMarlinPandora](#) New cuts/calibrations for Crilin and bugs fixes

[MarlinTrkProcessors](#) Modify FilterTracks adding new parameters

[Overlay](#) Two "bugs" fixes

[LCTuple](#) Add some branches for tracks studies

→ *MuonC\_MuSICv2\_v2.sif*

# Questions...

- 1 We can not trim all the files in ones → remove CaloSimHit (replace zlib in SIO?)
- 2 Reconstruction takes more than 40Gb of RAM
- 3 Tracks collections contain "pointers" to AllTracks (which has about 1M of tracks)... we can not remove it!
- 4 We need different strategies/configurations for different detector's zones
- 5 Analyzing tuples is very long...

## New development

- 1 New "gaudi-like" overlay processor with edm4hep input style
- 2 ACTs v35?
- 3 New Pandora?
- 4 Secondary vertexes and tagging, how to implement?