



# Agenda – 1 hour

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- Github issues/PR
- Benchmarks, tests
- Towards next Gate release
- AOB ...

# Github Issues & PRs

- Positron range [#379](#) (Minh Phuong Nguyen): in progress (David)
  - Accolinearity [#381](#) (Maxime Toussaint) mwe ok ; Mirjam?
  - G4Radioactivation [#378](#) (Alex Vergera Gil) Lydia and Alex? Option to activate. WIP
  - 64Cu positron spectra problem [#312](#) (TP. PHAM). Solved ? Will close it soon
  - Fast I124 ion source [#384](#) (Zhengzhi). Replied, no more news. Will close it soon
  - Generic Repeater, hit with a wrong head ID [#347](#) Ane PR#396. test in progress
  - PETscanner (cubicArray & genericRepeater) [#296](#) mwe ok ; Christian ? In progress
  - GATE Error related to SPECT\_FFD Example [#351](#) (not started yet, todo @Lyon)
  - AnatomicalOrientation [#359](#) (DavidB + Thomas + Alex) Maybe no code change but doc change
  - PR [#391](#): material database ? DavidB. Check the db before merge + link to G4 NIST Mat
  - PR [#387](#): github actions, Docker Thomas, Alex work in progress ; PR for docker scripts ; doc todo ; check qt + visu ; severals docker at the same time ? CMAKE options : all to start
- ... other issues

# PR – towards 10.7

## External dep:

- CLHEP: (G4 copy incomplete), need full CLHEP
  - To be discuss with G4
  - In the meantime: force the user to install clhep ?
  - In the cmake, clhelp version 2.4.4.0
  - **DavidB is on it !**
- MetalO: (reading/writing mhd)
  - To be investigated ; in the meantime: silent the warnings ?
  - Check AnatomicalOrientation Issue #359
  - **DavidB is on it !**
- ECAT/LMF:
  - Can we put them in external, auto compile with make
  - (Add flag to remove warning)
  - **Done ! PR in progress . Who can test ? Karl !**

# Gate benchmarks

- Automatization (**github action**)
- <https://github.com/OpenGATE/GateBenchmarks>
- Need some changes to store results from previous version
  - As a git submodule, stored on gitlab (because no restriction on LFS)

```
git clone --recursive https://github.com/OpenGATE/GateBenchmarks.git  
git submodule update --recursive --remote
```

# Benchmarks tests proposal

- T1: gamma, proton, carbon depth dose. 90% Done
- T2: voxelized navigation and dose (gamma). 90% Done
- T3: generic ion electron range 50% Done
- T4: PET NECR 75% Done
- T5: complete (fake) PET system. To be updated
- T6: DPK: Lydia proposed a notebook. Several PL. To be adapted  
 Add Generic ion source in DPK example. Alex

## Proposals

- RadioactiveDecay: Nicolas Arbor. In progress
- Mesh and merge actor(mesh inside vox): Julien Bert. In progress
- Optical: Carlotta, Mathieu ?
- Fix GateScintillation issue #346 #368 ; Carlotta, Mathieu ?
- Commit to fix #352 multi system, GateDeadTime. #369 ; prepare test ?

# Next Gate release

- With next Geant4 10.7 (dec 2020)
  - To date, almost only bug corrections
  - Proposal: version 9.1, early 2021
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- Adapt current version to Geant4 10.7
    - **Compilation is now with 10.7 (only)**
    - (LATER) Plan to provide a docker image (Thomas, put docker file on git)
    - (LATER) Plan to provide vGate (virtual machine)



# GATE web site

- New site is online !
- Lot of fine-tuning todo
- Keep asking for cookies
- Logins asked
  - Lydia, DavidB, DavidS, NilsK

<http://www.opengatecollaboration.org>



# Happy new year !

