

# Parallelization Meeting

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CERN  
2022-05-13



# Highlights

- **Container Cleanup, main branch (2022.05.09.)** ([tracc#188](#))  
by [@krasznaa](#), merged on 2022-05-10
- **Optimized SYCL Clusterization** ([tracc#187](#))  
by [@konradkusiak97](#), merged on 2022-05-11
- **Add additional comments to CUDA CCL algorithm** ([tracc#191](#))  
by [@ugGit](#), updated on 2022-05-13
- **Add CI jobs which run the GPU tests** ([vecmem#176](#))  
by [@paulgessinger](#), merged on 2022-05-12
- **add vecpar example** ([detray#235](#))  
by [@georgi-mania](#), updated on 2022-05-11
- **feat: add example of chained actors** ([detray#248](#))  
by [@niermann999](#), updated on 2022-04-27
- **Add jacobian and covariance engine** ([detray#251](#))  
by [@beomki-yeo](#), merged on 2022-05-09



# Contributions

- **Update on detray navigation: actors and policies**  
by Joana Niermann
- **Impact of compiler choice on GPU runtime performance**  
by Georgiana Mania

# **acts-project/traccc: PRs merged since 2022-04-29**

- **Add binary file I/O (PR#177)**  
by [@beomki-yeo](#), merged on 2022-04-29
- **Rewrite SYCL clusterization to reduce copies (PR#181)**  
by [@konradkusiak97](#), merged on 2022-05-03
- **Update Algebra Plugins and Detray, main branch (2022.05.03.) (PR#182)**  
by [@krasznaa](#), merged on 2022-05-04
- **Update VecMem, main branch (2022.05.03.) (PR#183)**  
by [@krasznaa](#), merged on 2022-05-04
- **Const Correctness Updates, main branch (2022.05.05.) (PR#184)**  
by [@krasznaa](#), merged on 2022-05-05
- **Common Device Doublet Finding, main branch (2022.05.05.) (PR#185)**  
by [@krasznaa](#), merged on 2022-05-06

## **acts-project/traccc: PRs merged since 2022-04-29 II**

- **Container Cleanup, main branch (2022.05.09.) (PR#188)**  
by [@krasznaa](#), merged on 2022-05-10
- **Cell EDM Update, main branch (2022.05.10.) (PR#189)**  
by [@krasznaa](#), merged on 2022-05-10
- **Cluster EDM Update, main branch (2022.05.11.) (PR#190)**  
by [@krasznaa](#), merged on 2022-05-11
- **Optimized SYCL Clusterization (PR#187)**  
by [@konradkusiak97](#), merged on 2022-05-11

# acts-project/traccc: Open PRs I

- Add additional comments to CUDA CCL algorithm ([PR#191](#))  
by [@ugGit](#), updated on 2022-05-13
- Move ‘event\_map.hpp’ into ‘traccc/io’ directory ([PR#176](#))  
by [@beomki-yeo](#), updated on 2022-04-25
- Reorganize seeding structure ([PR#167](#))  
by [@beomki-yeo](#), updated on 2022-04-14
- Implement and test a CUDA version of the module map ([PR#154](#))  
by [@stephenswat](#), updated on 2022-04-13
- Implement CUDA spacepoint formation with flat EDM ([PR#158](#))  
by [@stephenswat](#), updated on 2022-04-01

## **acts-project/vecmem: PRs merged since 2022-04-29 |**

- **Introduce vecmem::copy::memset, main branch (2022.05.02.) (PR#177)**  
by [@krasznaa](#), merged on 2022-05-03
- **Add CI jobs which run the GPU tests (PR#176)**  
by [@paulgessinger](#), merged on 2022-05-12

## acts-project/vecmem: Open PRs I

- [WIP] Add cms caching cuda allocator ([PR#79](#))  
by [@cgleggett](#), updated on 2021-04-28

# acts-project/detray: PRs merged since 2022-04-29 |

- **Grid2 Const Correctness, main branch (2022.04.28.) (PR#253)**  
by [@krasznaa](#), merged on 2022-04-29
- **Project Version Update, main branch (2022.05.03.) (PR#254)**  
by [@krasznaa](#), merged on 2022-05-03
- **Add jacobian and covariance engine (PR#251)**  
by [@beomki-yeo](#), merged on 2022-05-09

# acts-project/detray: Open PRs I

- **Generic container (PR#255)**  
by [@beomki-yeo](#), updated on 2022-05-12
- **add vecpar example (PR#235)**  
by [@georgi-mania](#), updated on 2022-05-11
- **feat: add example of chained actors (PR#248)**  
by [@nermann999](#), updated on 2022-04-27
- **Add scalar template parameter in magnetic field (PR#247)**  
by [@beomki-yeo](#), updated on 2022-04-26
- **exp: runge kutta specific navigation policy (PR#249)**  
by [@nermann999](#), updated on 2022-04-25
- **feat: make surface finders callable from navigator (PR#208)**  
by [@nermann999](#), updated on 2022-04-12

## acts-project/detray: Open PRs II

- **Reduce CI workflows (PR#244)**  
by [@beomki-yeo](#), updated on 2022-04-11
- **feat: adding nlohman library (PR#213)**  
by [@asalzburger](#), updated on 2022-04-08

# **acts-project/algebra-plugins: PRs merged since 2022-04-29** |

- **Stability improvement (PR#64)**  
by [@beomki-yeo](#), merged on 2022-04-29
- **Add dot product bewteen vector expression in smatrix (PR#65)**  
by [@beomki-yeo](#), merged on 2022-04-29

## **acts-project/algebra-plugins: Open PRs**

No new open PRs since **2022-04-29** in  
**acts-project/algebra-plugins**

## **acts-project/covfie: PRs merged since 2022-04-29**

No merged PRs since **2022-04-29** in  
**acts-project/covfie**

## **acts-project/covfie: Open PRs**

No new open PRs since **2022-04-29** in  
**acts-project/covfie**