

# Introduction

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CERN

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# Highlights

## tracc

- **SYCL Seed finding, Track param estimation and Spacepoint binning** ([PR#120](#))  
by [@konradkusiak97](#), merged on 2022-02-01

## vecmem

- **Improve alignment guarantees of (jagged) vector buffers** ([PR#161](#))  
by [@stephenswat](#), merged on 2022-01-26

## detray

- **Add unit test for CUDA navigator** ([PR#189](#))  
by [@beomki-yeo](#), merged on 2022-01-31

# Contributions today

- **Discussion on the (CUDA) navigator in detray**  
by Beom Ki Yeo, Joana Niermann

**Backup**

**acts-project/traccc**  
**Merged PRs**

## acts-project/traccc: PRs merged since 2022-01-21 I

- **Add 'link\_type' in container for indexing and its application to seeding (PR#108)**  
by [@beomki-yeo](#), merged on 2022-01-21
- **Remove multiplet number estimator and use the counter result to resize the multiplet container (PR#110)**  
by [@beomki-yeo](#), merged on 2022-01-21
- **External Updates, main branch (2022.01.21.) (PR#113)**  
by [@krasznaa](#), merged on 2022-01-24
- **Proposal to add feature table to README (PR#114)**  
by [@paulgessinger](#), merged on 2022-01-24
- **Make acts and traccc cpu seeding results same (PR#111)**  
by [@beomki-yeo](#), merged on 2022-01-24

## acts-project/traccc: PRs merged since 2022-01-21 II

- **Edit project status** ([PR#116](#))  
by [@beomki-yeo](#), merged on 2022-01-24
- **Various improvements to the README** ([PR#117](#))  
by [@stephenswat](#), merged on 2022-01-24
- **fix bug in seed selecting** ([PR#119](#))  
by [@beomki-yeo](#), merged on 2022-01-31
- **SYCL Seed finding, Track param estimation and Spacepoint binning** ([PR#120](#))  
by [@konradkusiak97](#), merged on 2022-02-01
- **Code Reorganisation, main branch (2022.02.01.)** ([PR#122](#))  
by [@krasznaa](#), merged on 2022-02-01
- **Change project status** ([PR#121](#))  
by [@beomki-yeo](#), merged on 2022-02-01

## acts-project/traccc: PRs merged since 2022-01-21 III

- **Executable Reorganisation, main branch (2022.02.02.)** ([PR#125](#))  
by [@krasznaa](#), merged on 2022-02-02
- **Parameterizing the 'compare\_with\_acts\_seeding' test** ([PR#123](#))  
by [@beomki-yeo](#), merged on 2022-02-02
- **Add SYCL CI, main branch (2022.02.02.)** ([PR#126](#))  
by [@krasznaa](#), merged on 2022-02-02
- **GitHub SYCL/HIP Compatibility, main branch (2022.02.02.)** ([PR#127](#))  
by [@krasznaa](#), merged on 2022-02-02
- **Use 'vecmem::vector' for seed container** ([PR#124](#))  
by [@beomki-yeo](#), merged on 2022-02-03



**acts-project/traccc**  
**Open PRs**

## acts-project/traccc: Open PRs I

- **Bug fix - initializing local memory in doublet finding** ([PR#128](#))  
by [@konradkusiak97](#), updated on 2022-02-04
- **Another CUDA implementation of connected component labeling** ([PR#19](#))  
by [@stephenswat](#), updated on 2021-12-01
- **Reject warnings in CI builds** ([PR#80](#))  
by [@stephenswat](#), updated on 2021-11-11

**acts-project/vecmem**  
**Merged PRs**

## acts-project/vecmem: PRs merged since 2022-01-21 |

- **Buffer Alignment Fixes, main branch (2022.01.25.)** (PR#160)  
by @krasznaa, merged on 2022-01-25
- **Improve alignment guarantees of (jagged) vector buffers** (PR#161)  
by @stephenswat, merged on 2022-01-26
- **SYCL Improvements, main branch (2022.01.28.)** (PR#162)  
by @krasznaa, merged on 2022-01-31
- **SYCL Improvements, main branch (2022.02.02.)** (PR#163)  
by @krasznaa, merged on 2022-02-02

**acts-project/vecmem**  
**Open PRs**

## acts-project/vecmem: Open PRs I

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

**acts-project/detray**  
**Merged PRs**

## acts-project/detray: PRs merged since 2022-01-21 |

- **Project Version Update, main branch (2022.01.21.) (PR#183)**  
by @krasznaa, merged on 2022-01-21
- **Fix a bug in tuple size accessor (PR#185)**  
by @beomki-yeo, merged on 2022-01-24
- **update CI cuda to 11.5.0 (PR#186)**  
by @beomki-yeo, merged on 2022-01-24
- **remove unnecessary lines in mask store data (PR#184)**  
by @beomki-yeo, merged on 2022-01-24
- **Update VecMem to v0.9.0 (PR#187)**  
by @beomki-yeo, merged on 2022-01-25
- **Add CUDA unit tests for enumeration (PR#188)**  
by @beomki-yeo, merged on 2022-01-28



## acts-project/detray: PRs merged since 2022-01-21 II

- **Add unit test for CUDA navigator** ([PR#189](#))  
by [@beomki-yeo](#), merged on 2022-01-31
- **renaming template parameter** ([PR#191](#))  
by [@beomki-yeo](#), merged on 2022-02-03

**acts-project/detray**  
**Open PRs**

## acts-project/detray: Open PRs I

- **ref: Harmonize type handling in surfaces and volumes** ([PR#180](#))  
by [@niermann999](#), updated on 2022-01-26
- **ref: Use adj matrix in geometry graph** ([PR#179](#))  
by [@niermann999](#), updated on 2022-01-17

**acts-project/algebra-plugins**  
**Merged PRs**

## acts-project/algebra-plugins: PRs merged since 2022-01-21 |

- **Warning Fixes, main branch (2022.02.03.)** ([PR#46](#))  
by [@krasnaa](#), merged on 2022-02-03
- **Fix identity error in CUDA debug builds with Eigen** ([PR#47](#))  
by [@stephenswat](#), merged on 2022-02-04

# **acts-project/algebra-plugins**

## **Open PRs**

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