

# Introduction

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CERN

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# Highlights

## algebra-plugins

- **Add Matrix Type, main branch (2022.02.11.)** ([PR#50](#))  
by [@krasznaa](#), merged on 2022-02-14

## detray

- **Add track parameters** ([PR#196](#))  
by [@beomki-yeo](#), merged on 2022-02-16
- **feat: Introduce detector metadata** ([PR#200](#))  
by [@niermann999](#), merged on 2022-02-13
- **OPEN: Add RK stepper** ([PR#204](#))  
by [@beomki-yeo](#), updated on 2022-02-18

# Contributions today I

- **SYCL Seed finding, Track param estimation and Spacepoint binning**  
by Konrad Aleksander Kusiak
- **Stephen's quest for the optimal parallelization strategy for propagation**  
by Stephen Nicholas Swatman

**Backup**

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

## acts-project/traccc: PRs merged since 2022-02-04 I

- **Bug fix - initializing local memory in doublet finding (PR#128)**  
by [@konradkusiak97](#), merged on 2022-02-04
- **Fix warning in track parameter estimation (PR#131)**  
by [@beomki-yeo](#), merged on 2022-02-10
- **Avoid zero block case for track parameter estimation (PR#134)**  
by [@beomki-yeo](#), merged on 2022-02-14
- **Update seeding configuration (PR#135)**  
by [@beomki-yeo](#), merged on 2022-02-14
- **Warning Fixes, main branch (2022.02.10.) (PR#132)**  
by [@krasznaa](#), merged on 2022-02-16
- **Add boost program options (PR#136)**  
by [@beomki-yeo](#), merged on 2022-02-17

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

## acts-project/traccc: Open PRs I

- **Add Seeding Performance Writer (PR#130)**  
by [@beomki-yeo](#), updated on 2022-02-18
- **Add a mapper for validation purpose (PR#133)**  
by [@beomki-yeo](#), updated on 2022-02-17
- **Another CUDA implementation of connected component labeling (PR#19)**  
by [@stephenswat](#), updated on 2021-12-01



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

## acts-project/vecmem: PRs merged since 2022-02-04 I

- **LLVM CUDA Compatibility, main branch (2022.02.04.)** ([PR#164](#))  
by [@krasnaa](#), merged on 2022-02-11
- **CUDA Runtime Dynamic Linking, main branch (2022.02.05.)** ([PR#165](#))  
by [@krasnaa](#), merged on 2022-02-11

**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 2022-02-04 |

- **Warning Improvements, main branch (2022.02.04.)** (PR#193)  
by @krasznaa, merged on 2022-02-05
- **Use pointer for detector in navigator class** (PR#194)  
by @beomki-yeo, merged on 2022-02-05
- **Project Version Update, main branch (2022.02.09.)** (PR#198)  
by @krasznaa, merged on 2022-02-09
- **feat: Introduce detector metadata** (PR#200)  
by @niermann999, merged on 2022-02-13
- **update to algebra plugins v0.7.0** (PR#202)  
by @beomki-yeo, merged on 2022-02-15
- **Add track parameters** (PR#196)  
by @beomki-yeo, merged on 2022-02-16

## acts-project/detray: PRs merged since 2022-02-04 II

- **Project version update to v0.6.0** ([PR#203](#))  
by [@beomki-yeo](#), merged on 2022-02-16

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



## acts-project/detray: Open PRs I

- **Add RK stepper** ([PR#204](#))  
by [@beomki-yeo](#), updated on 2022-02-18
- **ref: Remove edges from surfaces** ([PR#201](#))  
by [@niermann999](#), updated on 2022-02-15
- **ref: Harmonize type handling in surfaces and volumes** ([PR#180](#))  
by [@niermann999](#), updated on 2022-02-11
- **feat: add guided navigator example** ([PR#197](#))  
by [@niermann999](#), updated on 2022-02-09
- **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 2022-02-04 |

- **Fix identity error in CUDA debug builds with Eigen** ([PR#47](#))  
by [@stephenswat](#), merged on 2022-02-04
- **More MSVC Fixes, main branch (2022.02.04.)** ([PR#48](#))  
by [@krasznaa](#), merged on 2022-02-11
- **Add Matrix Type, main branch (2022.02.11.)** ([PR#50](#))  
by [@krasznaa](#), merged on 2022-02-14