acts-project/traccc: PRs merged between 2023-01-27 and 2023-02-10 I

- ▶ Implement cell partitioning in CUDA (PR#309) by @stephenswat, no assignee, merged on 2023-01-30
- ▶ So Alpaka first steps (PR#300) by @StewMH, no assignee, merged on 2023-01-30
- Fix unused parameter in CCA code (PR#310) by @stephenswat, no assignee, merged on 2023-01-31
- ► Implementation of Nvidia NVTX functions into timer class to use for performance studies (PR#312) by @Xola101, no assignee, merged on 2023-02-03
- ▶ Fixed multithreaded application to run different events (PR#315) by @guilhermeAlmeida1, no assignee, merged on 2023-02-07
- Fixed partition merging in Cuda CCA (PR#313) by @guilhermeAlmeida1, no assignee, merged on 2023-02-07

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- Add Particle Generation Options (PR#314) by @beomki-yeo, no assignee, updated on 2023-02-09
- Changed device clusterization to flat EDM (PR#299) by @guilhermeAlmeida1, no assignee, updated on 2023-02-06
- ▶ **GPU Track Fitting** (PR#296) by @beomki-yeo, **no assignee**, updated on 2023-02-06
- \$\frac{1}{1}\$ ci: Add basic GPU CI (PR#237)
 by @paulgessinger, no assignee, updated on 2023-01-25
- ▶ ↑ MPS benchmarking scripts and test workflow (PR#244) by @Chamodya-ka, no assignee, updated on 2023-01-25
- ▶ **Changed doublets & triplets data structure to spM based jagged vectors** (PR#252) by @guilhermeAlmeida1, **no assignee**, updated on 2023-01-25
- \$\frac{1}{2}\$ added mps script tests (PR#255)
 by @Chamodya-ka, no assignee, updated on 2023-01-25
- ► ↑ Changed CPU clustering to use flat vectors of alt_cells as input and alt_measurements internally. (PR#304)
 by @guilhermeAlmeida1, no assignee, updated on 2023-01-25

acts-project/traccc: Open PRs II

- \$\\$\ Add infrastructure for CUDA graph algorithms (PR#307) by @stephenswat, no assignee, updated on 2023-01-25
- ▶ **\(\) Alternative CUDA implementation of seed finding (**PR#230) by @stephenswat, **no assignee**, updated on 2023-01-11
- ▶ \$\tau\$ Improve memory performance of CUDA CCA code (PR#235) by @stephenswat, no assignee, updated on 2023-01-11
- ▶ \$\text{\text{\$\text{\$\text{\$\text{Implement} and test a CUDA version of the module map} (PR#154)}} by @stephenswat, no assignee, updated on 2022-04-13
- ▶ \$\frac{1}{10}\$ Implement CUDA spacepoint formation with flat EDM (PR#158) by @stephenswat, no assignee, updated on 2022-04-01

acts-project/detray: PRs merged between 2023-01-27 and 2023-02-10 |

- ▶ Add detector view type in detector class (PR#378) by @beomki-yeo, no assignee, merged on 2023-01-30
- ▶ \$ Update to project version to 19 (PR#380) by @beomki-yeo, no assignee, merged on 2023-01-31
- ▶ **fix:** add const specialization for is_device_view trait (PR#381) by @niermann999, no assignee, merged on 2023-02-01
- ▶ **Add angle units** (PR#384)
 by @beomki-yeo, no assignee, merged on 2023-02-02
- ▶ Add 'utils' directory into 'check_format.sh' (PR#385) by @beomki-yeo, no assignee, merged on 2023-02-03
- Change random track generator member variable to a pointer (PR#386) by @beomki-yeo, no assignee, merged on 2023-02-06
 chore: add mathematical constants and clean up some float conversions (PR#372) by @niermann999, no assignee, merged on 2023-02-09
- by @niermann999, no assignee, merged on 2023-02-09

 ▶ Add 'propagate_sync' function for thread synchornization (PR#387)
 by @beomki-yeo, no assignee, merged on 2023-02-09

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- ▶ **Add momentum range and vertex smearing to 'random_track_generator'** (PR#388) by @beomki-yeo, **no assignee**, updated on 2023-02-10
- ▶ १७ ref: pathcorrection unittest uses target_aborter (PR#383) by @niermann999, no assignee, updated on 2023-02-09
- ► 1 feat: cylinder portal intersector (PR#370) by @niermann999, no assignee, updated on 2023-01-27
- ref: move surface vector into sf finder store (PR#367) by @niermann999, no assignee, updated on 2023-01-23
 feat: material builders (PR#364)
- by @niermann999, no assignee, updated on 2023-01-17

 feat: surface barcode (PR#368)
 by @niermann999, no assignee, updated on 2023-01-12
- ▶ \$\frac{1}{2}\$ ref: Add new stepper policy and benchmark it (PR#327) by @niermann999, no assignee, updated on 2022-11-10
- ▶ **11 Volume radiation length** (PR#328) by @beomki-yeo, **no assignee**, updated on 2022-10-26
- \$\ \text{add vecpar example (PR#235)}\$
 by @georgi-mania, no assignee, updated on 2022-07-13

acts-project/vecmem: PRs merged between 2023-01-27 and 2023-02-10 I

- ► \(\bar{\text{Warning Fixes, main branch (2023.02.02.)}} \) (PR#217) by @krasznaa, no assignee, merged on 2023-02-02

acts-project/vecmem: Open PRs I

▶ **[WIP]** Add cms caching cuda allocator (PR#79) by @cgleggett, no assignee, updated on 2021-04-28

- ▶ fix: assert in cmath vector getter (PR#88)
 by @niermann999, no assignee, merged on 2023-01-27
- ▶ **fix: implicit conversions** (PR#87) by @niermann999, no assignee, merged on 2023-01-30
- ► Eigen SYCL Tests, main branch (2023.02.03.) (PR#90) by @krasznaa, no assignee, merged on 2023-02-03
- ▶ **VecMem Update, main branch (2023.02.03.)** (PR#91) by @krasznaa, no assignee, merged on 2023-02-03

acts-project/algebra-plugins: Open PRs I

▶ **Added Fastor as a full backend and frontend.** (PR#78) by @wermos, no assignee, updated on 2022-11-21

No merged PRs since 2023-01-27 in acts-project/covfie