

































Pull request and issue summary for acts-project/acts















September 24, 2024

acts-project/acts: PRs merged between 2024-09-10 and 2024-09-24 |

















- ▶  **refactor: replace 'Acts::min_max' with 'std::ranges::minmax_element'** (#3601)
by @AJPflegler,  reviewed by @stephenswat, merged on 2024-09-10
- ▶  **refactor!: Rename 'EigenStepper' dense extension** (#3603)
by @andiwand,  reviewed by @AJPflegler, merged on 2024-09-10
- ▶  **refactor: update 'to_array'** (#3600)
by @AJPflegler,  reviewed by @stephenswat, merged on 2024-09-10
- ▶  **refactor: modernise GeometryHierarchyMap** (#3594)
by @AJPflegler,  reviewed by @stephenswat, merged on 2024-09-10
- ▶  **refactor: add C++23 'std::ranges::contains' place holder** (#3598)
by @AJPflegler,  reviewed by @stephenswat, merged on 2024-09-10
- ▶  **fix: adding GeometryId to detray portals** (#3606)
by @asalzburger,  reviewed by @niermann999, merged on 2024-09-11
- ▶  **refactor: Changed the GeoModelToDetectorVolume to be able to return Acts::Volumes** (#3576)
by @Berggren-Jonas,  reviewed by @paulgessinger, merged on 2024-09-12
- ▶  **refactor: use 'std::ranges::sort' and 'reverse'** (#3596)
by @AJPflegler,  reviewed by @stephenswat, merged on 2024-09-12















acts-project/acts: PRs merged between 2024-09-10 and 2024-09-24 II

- ▶  **feat: add counters to propagation summary (#3602)**
by @asalzburger,  reviewed by @benjaminhuth, merged on 2024-09-12
- ▶  **feat: generalized conversion of FullPhysicalVolume (#3585)**
by @Berggren-Jonas,  reviewed by @noemina, merged on 2024-09-16
- ▶  **refactor!: 'VolumeBounds' becomes a scoped enum (#3513)**
by @paulgessinger,  reviewed by @asalzburger, merged on 2024-09-16
- ▶  **refactor: Make 'ViewConfig' usable with designated initializers (#3613)**
by @paulgessinger,  reviewed by @AJPfleger, merged on 2024-09-16
- ▶  **fix: Remove 'using namespace' in Detray plugin header (#3616)**
by @paulgessinger,  reviewed by @stephenswat, merged on 2024-09-17
- ▶  **chore: Fix doc comment flavor in BoundingBox (#3621)**
by @paulgessinger,  reviewed by @AJPfleger, merged on 2024-09-17
- ▶  **feat: broadcast dataflow check to python (#3624)**
by @asalzburger,  reviewed by @benjaminhuth, merged on 2024-09-18
- ▶  **refactor: TrackingGeometry interface cleanup (#3612)**
by @paulgessinger,  reviewed by @benjaminhuth, merged on 2024-09-18

















- ▶  **refactor: Improved Python bindings for algebra types (#3611)**
by @paulgessinger,  reviewed by @asalzburger, merged on 2024-09-19
- ▶  **feat: Improvements to multitrajectory iterators (#3619)**
by @stephenswat,  reviewed by @paulgessinger, merged on 2024-09-19
- ▶  **refactor: Modified from_json in AmbiguityConfigJson for easier implementation in Athena (#3628)**
by @Ragansu,  reviewed by @CarloVarni, merged on 2024-09-19
- ▶  **chore: synchronize versions (#3631)**
by @asalzburger,  reviewed by @stephenswat, merged on 2024-09-20
- ▶  **refactor: Visualization3D location and API (#3622)**
by @paulgessinger,  reviewed by @AJPfleger, merged on 2024-09-20
- ▶  **refactor(geo): Portal(Link)+Surface verbosity reduction (#3636)**
by @paulgessinger,  reviewed by @AJPfleger, merged on 2024-09-20
- ▶  **feat(util): Add GraphViz helper types (#3635)**
by @paulgessinger,  reviewed by @asalzburger, merged on 2024-09-20

acts-project/acts: PRs merged between 2024-09-10 and 2024-09-24 IV

















- ▶  **feat: Allow digitization to save cells (#3626)**
by @stephenswat,  reviewed by @paulgessinger, merged on 2024-09-20
- ▶  **ci: Run clang-tidy on the ActSVG plugin (#3639)**
by @stephenswat,  reviewed by @asalzburger, merged on 2024-09-23
- ▶  **refactor: Reduce abuse of auto in mbf smoother (#3630)**
by @CarloVarni,  reviewed by @paulgessinger, merged on 2024-09-23
- ▶  **refactor!: SourceLink setting only via rvalue reference (#3488)**
by @paulgessinger,  reviewed by @AJPfleger, merged on 2024-09-23
- ▶  **docs: Add minimal Spack spec for ACTS core (#3638)**
by @stephenswat,  reviewed by @AJPfleger, merged on 2024-09-23
- ▶  **build: Update tracc to v0.16.0 (#3634)**
by @stephenswat,  reviewed by @asalzburger, merged on 2024-09-23
- ▶  **refactor: Remove Sequencer dataflow override (#3625)**
by @paulgessinger,  reviewed by @asalzburger, merged on 2024-09-24
- ▶  **refactor!: Fuse 'Actor' and 'Aborter' (#3573)**
by @andiwand,  reviewed by @paulgessinger, merged on 2024-09-24

- ▶  **fix: added GeoShapeSubtraction converter for the failing conversion of RPCs to SensitiveSurface (#3592)**
by @Berggren-Jonas,  reviewed by @dimitra97, updated on 2024-09-24
- ▶  **refactor: Remove MPL library (#3642)**
by @stephenswat,  reviewed by @andiwand, updated on 2024-09-24
- ▶  **chore: update ACTSVG version (#3643)**
by @asalzburger,  reviewed by @niermann999, updated on 2024-09-24
- ▶  **refactor!: Return all track states from Core CKF (#3391)**
by @andiwand,  comment by @andiwand, updated on 2024-09-24
- ▶  **fix: kf+gsf: correct hole-tagging for edge case (#3637)**
by @AJPfleger,  comment by @andiwand, updated on 2024-09-24
- ▶  **feat: add Detray surface grid converter (#3608)**
by @asalzburger,  reviewed by @niermann999, updated on 2024-09-24
- ▶  **feat: Add measurement emplace functions (#3627)**
by @stephenswat,  comment by @stephenswat, updated on 2024-09-23














acts-project/acts: Open PRs II

- ▶  **Stale** ci: **Reenable some ExaTrkX tests (#3395)**
by @benjaminhuth,  **no reviewer**, updated on 2024-09-21
- ▶  **Stale** fix: **Require TBB to be found by cmake (#3507)**
by @benjaminhuth,  reviewed by @timadye, updated on 2024-09-21
- ▶  feat!: **Track-EDM like implementation for the space points, to be used in the seeding (#3432)**
by @CarloVarni,  **no reviewer**, updated on 2024-09-20
- ▶  build: **Change CMake settings for tracc deps (#3620)**
by @stephenswat,  comment by @paulgessinger, updated on 2024-09-20
- ▶  refactor: **modernise map utils (#3615)**
by @AJPfleger,  comment by @andiwand, updated on 2024-09-20
- ▶  **Stale** feat: **GeoShapes to DetectorVolumes and GeoMaterial Converters (#3268)**
by @Matthewharri,  comment by @Matthewharri, updated on 2024-09-18
- ▶  feat: **Add a fastjet plugin (#3617)**
by @gagnonlg,  **no reviewer**, updated on 2024-09-17
- ▶  refactor: **use 'std::ranges::find', 'find_if', 'find_if_not' (#3614)**
by @AJPfleger,  comment by @paulgessinger, updated on 2024-09-17























acts-project/acts: Open PRs III

- ▶  **Stale** feat: **tracc plugin refactor, tracc chain reconstruction only, and fixes (#3505)**
by @fredevb,  **no reviewer**, updated on 2024-09-13
- ▶  refactor: **set convertMaterial as configurable (#3604)**
by @galocco,  reviewed by @asalzburger, updated on 2024-09-12
- ▶  refactor: **use 'std::ranges::all_of', 'any_of', 'none_of' (#3593)**
by @AJPfleger,  reviewed by @stephenswat, updated on 2024-09-10
- ▶  **fix!: Use 'ActsScalar' in binning tools (#3482)**
by @stephenswat,  comment by @stephenswat, updated on 2024-09-10
- ▶  **Stale** feat: **allow bare Surface pointers to be written to JSON (#3493)**
by @asalzburger,  comment by @paulgessinger, updated on 2024-09-07
- ▶  **fix: Further fixes to detray plugin (#3563)**
by @stephenswat,  reviewed by @andiwand, updated on 2024-09-07
- ▶  **Stale** feat: **tracc plugin (conversion) (#3281)**
by @fredevb,  comment by @paulgessinger, updated on 2024-08-31
- ▶  **Stale** fix: **detray plugin (cmake flags, CI, and compile errors) (#3363)**
by @fredevb,  comment by @EleniXoch, updated on 2024-08-31
























acts-project/acts: Open PRs IV

- ▶  refactor: **Move MLAmbiguitySolver to Core (#3272)**
by @Corentin-Allaire,  comment by @Corentin-Allaire, updated on 2024-08-30
- ▶  Stale feat!: **(fix + chore) streamline nSegments usage (#3419)**
by @asalzbunger,  comment by @asalzbunger, updated on 2024-08-28
- ▶  Stale feat: **Introduce the usage of the geomodel converters for the Muon System (#3348)**
by @dimitra97,  comment by @dimitra97, updated on 2024-08-23
- ▶  Stale refactor: **Lift GenericDetector to a Plugin (#3425)**
by @benjaminhuth, review requested, review requested, updated on 2024-08-21
- ▶  Stale feat: **tracc chain in examples (common chain logic and CPU chain) (#3320)**
by @fredevb,  **no reviewer**, updated on 2024-08-15
- ▶  Stale feat: **introduction obj simhit writer (#3180)**
by @asalzbunger,  **no reviewer**, updated on 2024-06-15
- ▶  WIP fix: **TrackSelector remove broken m_noEtaCuts (#3640)**
by @timadye,  comment by @timadye, updated on 2024-09-24




















acts-project/acts: Open PRs ▼

- ▶   **perf: Use MBF smoother by default in 'TrackHelpers' in Examples track finding (#3582)**
by @andiwand,  **no reviewer**, updated on 2024-09-24
- ▶   **refactor!: Clean track EDM projector (#3605)**
by @andiwand,  **no reviewer**, updated on 2024-09-24
- ▶   **ci: Download dependencies as tarball (#3520)**
by @paulgessinger,  **no reviewer**, updated on 2024-09-24
- ▶   **refactor: Bump min json ver, make json keys static (#2968)**
by @paulgessinger, review requested, updated on 2024-09-24
- ▶    **feat: Add statistics to propagation (#3450)**
by @andiwand,  comment by @paulgessinger, updated on 2024-09-21
- ▶    **draft: Gauss vertex seeding with time (#3491)**
by @CENcll,  comment by @andiwand, updated on 2024-09-21
- ▶   **feat: Gen 3 portal shells (#3564)**
by @paulgessinger,  **no reviewer**, updated on 2024-09-20



















acts-project/acts: Open PRs VI









- ▶   **refactor: use structured bindings (#3632)**
by @AJPflegler,  changes requested by @stephenswat, updated on 2024-09-20
- ▶   **refactor: reduce complexity of highly nested blocks (#3633)**
by @AJPflegler,  comment by @andiwand, updated on 2024-09-20
- ▶    **chore: Bump minimum boost version to 1.78.0 (#3517)**
by @paulgessinger,  **no reviewer**, updated on 2024-09-19
- ▶   **chore: update license header (#3623)**
by @AJPflegler,  **no reviewer**, updated on 2024-09-17
- ▶   **refactor(material)!: update slabs from 'float' to 'double' (#3609)**
by @AJPflegler,  **no reviewer**, updated on 2024-09-12
- ▶    **refactor: Rework detector handling in Examples (#3498)**
by @andiwand,  **no reviewer**, updated on 2024-09-07
- ▶   **feat: Allow volume constrain for propagation (#3470)**
by @andiwand,  **no reviewer**, updated on 2024-09-06

acts-project/acts: Open PRs VII
















- ▶   **refactor!: Decouple navigation and stepping (#3449)**
by @andiwand,  **no reviewer**, updated on 2024-09-06
- ▶   **feat: detray plugin surface grids (#3429)**
by @EleniXoch,  comment by @EleniXoch, updated on 2024-09-04
- ▶   **feat: GeoModel plugin changes for ITk building. (#3519)**
by @benjaminhuth,  comment by @paulgessinger, updated on 2024-09-03
- ▶    **feat(geometry): Allow operator« on surfaces without detector elements (#3467)**
by @paulgessinger,  comment by @paulgessinger, updated on 2024-08-31
- ▶   **refactor: Detector Element refactoring proposal (#3574)**
by @benjaminhuth,  comment by @asalzburger, updated on 2024-08-29
- ▶   **feat: Adding efficiency vs production radius to output root files (#3539)**
by @AichaMattouhi,  comment by @paulgessinger, updated on 2024-08-29






acts-project/acts: Open PRs VIII

- ▶   **WIP** Stale **feat: Added possibility to keep intermediate particles from PythiaGenerator**
WIP (#3414)
by @pbutti,  **no reviewer**, updated on 2024-08-22
- ▶   **WIP** Stale **refactor: Rework physics performance monitoring for Examples** (#3359)
by @andiwand,  **no reviewer**, updated on 2024-08-17
- ▶   **WIP** Stale **refactor: Move config files from ODD to Acts to ensure compatibility** (#3407)
by @benjaminhuth,  **no reviewer**, updated on 2024-08-17
- ▶   **WIP** Stale **build: physmon for tracc chains (host and cuda)** (#3403)
by @fredevb,  **no reviewer**, updated on 2024-08-16
- ▶   **WIP** Stale **feat: tracc cuda example** (#3372)
by @fredevb,  **no reviewer**, updated on 2024-08-16
- ▶   **WIP** Stale **refactor: Some internal GSF refactorings** (#2697)
by @benjaminhuth,  changes requested by @andiwand, updated on 2024-07-21
















- ▶   **WIP**  **Stale** **feat: Add per event timing (#3124)**
by @CouthuresJeremy,  comment by @andiwand, updated on 2024-07-11
- ▶   **WIP**  **Stale** **feat: Add GSF component momentum cut to stabilize fit (#2661)**
by @benjaminhuth,  comment by @benjaminhuth, updated on 2024-05-25

- ▶ **🕒 Common shared measurement computation? (#3618)**
by @gagnonlg, updated on 2024-09-17
- ▶ **🕒 Bug: Example Framework does not compile in an environment without TBB (#3610)**
by @tomeichlersmith, updated on 2024-09-13













- ▶  Stale **'common' CMake preset requires ccache (#3537)**
by @stephenswat, updated on 2024-09-21
- ▶  Stale **Proposal: surface and portal navigation (including target surfaces) for Gen3 (#3526)**
by @asalzburger, updated on 2024-09-21
- ▶   Stale **chore: Bump minimum boost version to 1.78.0 (#3517)**
by @paulgessinger,  **no reviewer**, updated on 2024-09-19
- ▶  Stale **fix: Require TBB to be found by cmake (#3507)**
by @benjaminhuth,  **no reviewer**, updated on 2024-09-21
- ▶  Stale **feat: tracc plugin refactor, tracc chain reconstruction only, and fixes (#3505)**
by @fredevb,  **no reviewer**, updated on 2024-09-13
- ▶   Stale **draft: Gauss vertex seeding with time (#3491)**
by @CENcll,  **no reviewer**, updated on 2024-09-21
- ▶   Stale **feat: Add statistics to propagation (#3450)**
by @andiwand,  **no reviewer**, updated on 2024-09-21

- ▶  **Stale** ci: Reenable some ExaTrkX tests (#3395)
by @benjaminhuth,  **no reviewer**, updated on 2024-09-21
- ▶  **Stale** feat: GeoShapes to DetectorVolumes and GeoMaterial Converters (#3268)
by @Matthewharri,  **no reviewer**, updated on 2024-09-18
- ▶  **Stale** FPE: RootTrajectoryStatesWriter (#2348)
by @paulgessinger, updated on 2024-09-15

















acts-project/acts: All stale Issues / PRs I

- ▶  **Stale** **ci: Reenable some ExaTrkX tests (#3395)**
by @benjaminhuth,  **no reviewer**, updated on 2024-09-21
- ▶   **Stale** **feat: Add statistics to propagation (#3450)**
by @andiwand,  **no reviewer**, updated on 2024-09-21
- ▶   **Stale** **draft: Gauss vertex seeding with time (#3491)**
by @CENcll,  **no reviewer**, updated on 2024-09-21
- ▶  **Stale** **Proposal: surface and portal navigation (including target surfaces) for Gen3 (#3526)**
by @asalzburger, updated on 2024-09-21
- ▶  **Stale** **'common' CMake preset requires ccache (#3537)**
by @stephenswat, updated on 2024-09-21
- ▶  **Stale** **fix: Require TBB to be found by cmake (#3507)**
by @benjaminhuth,  **no reviewer**, updated on 2024-09-21
- ▶   **Stale** **chore: Bump minimum boost version to 1.78.0 (#3517)**
by @paulgessinger,  **no reviewer**, updated on 2024-09-19



















acts-project/acts: All stale Issues / PRs II

- ▶  **Stale** feat: **GeoShapes to DetectorVolumes and GeoMaterial Converters** (#3268)
by @Matthewharri,  **no reviewer**, updated on 2024-09-18
- ▶  **Stale** **FPE: RootTrajectoryStatesWriter** (#2348)
by @paulgessinger, updated on 2024-09-15
- ▶  **Stale** feat: **tracc plugin refactor, tracc chain reconstruction only, and fixes** (#3505)
by @fredevb,  **no reviewer**, updated on 2024-09-13
- ▶   **WIP** **Stale** refactor: **Rework detector handling in Examples** (#3498)
by @andiwand,  **no reviewer**, updated on 2024-09-07
- ▶  **Stale** feat: **allow bare Surface pointers to be written to JSON** (#3493)
by @asalzburger,  **no reviewer**, updated on 2024-09-07
- ▶  **Stale** **'GlobalChiSquareFitter' produces parameters in wrong volume** (#3444)
by @andiwand, updated on 2024-09-05
- ▶  **Stale** **Bug: __acts_dfelibs_version unset in CMakeLists.txt** (#3457)
by @wdconinc, updated on 2024-09-05











acts-project/acts: All stale Issues / PRs III

- ▶  Stale **feat: tracc plugin (conversion) (#3281)**
by @fredevb,  **no reviewer**, updated on 2024-08-31
- ▶  Stale **fix: detray plugin (cmake flags, CI, and compile errors) (#3363)**
by @fredevb,  **no reviewer**, updated on 2024-08-31
- ▶   WIP Stale **feat(geometry): Allow operator« on surfaces without detector elements (#3467)**
by @paulgessinger,  **no reviewer**, updated on 2024-08-31
- ▶  Stale **feat!: (fix + chore) streamline nSegments usage (#3419)**
by @asalzburger,  **no reviewer**, updated on 2024-08-28
- ▶  Stale **feat: Introduce the usage of the geomodel converters for the Muon System (#3348)**
by @dimitra97,  **no reviewer**, updated on 2024-08-23
- ▶   WIP Stale **feat: Added possibility to keep intermediate particles from PythiaGenerator WIP (#3414)**
by @pbutti,  **no reviewer**, updated on 2024-08-22
- ▶  Stale **refactor: Lift GenericDetector to a Plugin (#3425)**
by @benjaminhuth,  **no reviewer**, updated on 2024-08-21









acts-project/acts: All stale Issues / PRs IV

- ▶   **WIP** **Stale** refactor: Rework physics performance monitoring for Examples (#3359)
by @andiwand,  **no reviewer**, updated on 2024-08-17
- ▶   **WIP** **Stale** refactor: Move config files from ODD to Acts to ensure compatibility (#3407)
by @benjaminhuth,  **no reviewer**, updated on 2024-08-17
- ▶   **WIP** **Stale** build: physmon for tracc chains (host and cuda) (#3403)
by @fredevb,  **no reviewer**, updated on 2024-08-16
- ▶   **WIP** **Stale** feat: tracc cuda example (#3372)
by @fredevb,  **no reviewer**, updated on 2024-08-16
- ▶  **Stale** feat: tracc chain in examples (common chain logic and CPU chain) (#3320)
by @fredevb,  **no reviewer**, updated on 2024-08-15
- ▶  **Stale** Provide tools & setup for tracking of Heavy Ion on ITk events in standalone ACTS environment (#1778)
by @tboldagh, updated on 2024-07-24
- ▶   **WIP** **Stale** refactor: Some internal GSF refactorings (#2697)
by @benjaminhuth,  **no reviewer**, updated on 2024-07-21









acts-project/acts: All stale Issues / PRs V

- ▶   **WIP** **Stale feat: Add per event timing (#3124)**
by @CouthuresJeremy,  **no reviewer**, updated on 2024-07-11
- ▶  **Stale Project build flags are difficult to control (2024.05.29.) (#3231)**
by @krasznaa, updated on 2024-07-04
- ▶  **Stale [bug] Off axis endcap with dd4hep plugin. (#942)**
by @whit2333, updated on 2024-06-26
- ▶  **Stale Debug Information in Acts Seeder (#944)**
by @osbornjd, updated on 2024-06-26
- ▶  **Stale Reproducibility test using hash checks for non-linear KF (#1246)**
by @paulgessinger, updated on 2024-06-25
- ▶  **Stale Documentation update: Core (#1418)**
by @paulgessinger, updated on 2024-06-25
- ▶  **Stale Documentation: hints for debugging (#1463)**
by @timadye, updated on 2024-06-25
- ▶  **Stale Add Primary Vertex Label to tracks (#1544)**
by @Lucas-Borgna, updated on 2024-06-25










acts-project/acts: All stale Issues / PRs VI

- ▶  **Stale Create volume restricted BFieldMap (#1659)**
by @asalzburger, updated on 2024-06-25
- ▶  **Stale Cmake error if ACTS_BUILD_PLUGIN_ACTSVG=ON (#1818)**
by @DraTeots, updated on 2024-06-25
- ▶  **Stale LCG compatibility (#2054)**
by @paulgessinger, updated on 2024-06-25
- ▶  **Stale EstimateTrackParamsFromSeed does not use time of measurement (#2136)**
by @andiwand, updated on 2024-06-25
- ▶  **Stale Construct tracking geometry from python (#2173)**
by @andiwand, updated on 2024-06-25
- ▶  **Stale Missing 'cmake_minimum_required' in 'ActsConfig.cmake.in' (#2216)**
by @andiwand, updated on 2024-06-25
- ▶  **Stale Bug: not all tracks have fittedMomentum (#2364)**
by @felix-russo, updated on 2024-06-25
- ▶  **Stale Bug: AMVF 'deleteLastVertex' might be wrong (#2380)**
by @andiwand, updated on 2024-06-25









acts-project/acts: All stale Issues / PRs VII

- ▶  **Stale [Bug] Fatras can't seem to handle energy loss for electrons on thin surfaces (#2498)**
by @janheinri, updated on 2024-06-25
- ▶  **Stale [Feature Request] Padding utility for field map in case tracking volume is larger than a given field map (#2523)**
by @janheinri, updated on 2024-06-25
- ▶  **Stale Bug: Fatras sets step size to 0 (#2543)**
by @andiwand, updated on 2024-06-25
- ▶  **Stale Ensure Fitters use all provided measurements (#2737)**
by @andiwand, updated on 2024-06-25
- ▶  **Stale bug: KF verbosity statement (#3097)**
by @osbornjd, updated on 2024-06-20
- ▶  **Stale feat: introduction obj simhit writer (#3180)**
by @asalzburger,  **no reviewer**, updated on 2024-06-15
- ▶  **Stale EDM Memory usage (#1516)**
by @paulgessinger, updated on 2024-05-25









acts-project/acts: All stale Issues / PRs VIII








- ▶  **Stale Detailed timing per event (#1700)**
by @CouthuresJeremy, updated on 2024-05-25
- ▶  **Stale feat: Add GSF component momentum cut to stabilize fit (#2661)**
by @benjaminhuth,  **no reviewer**, updated on 2024-05-25
- ▶  **Stale Question: Set a different value of eta range using ODD (#2776)**
by @rubihason, updated on 2024-05-25
- ▶  **Stale Write Fatras documentation (#2796)**
by @andiwand, updated on 2024-05-25
- ▶  **Stale bug: documentation always builds in '<source>' (#2798)**
by @AJPfleger, updated on 2024-05-25
- ▶  **Stale bug: IVF is throwing errors in ODD full chain (#3120)**
by @andiwand, updated on 2024-05-18
- ▶  **Stale Documentation on geometry misalignments (#2940)**
by @paulgessinger, updated on 2024-05-17
- ▶  **Stale Bug: material map auto tuning only considers the "Default" mapping type (#2942)**
by @plariono, updated on 2024-05-17

acts-project/acts: All stale Issues / PRs IX









- ▶  **Stale bug: some dependencies in setup script wrong (#3014)**
by @AJPfleger, updated on 2024-05-17
- ▶  **Stale perf: CKF measurement selector runs after track state creation (#3081)**
by @andiwand, updated on 2024-05-05
- ▶  **Stale perf: CKF general (#3082)**
by @andiwand, updated on 2024-05-05
- ▶  **Stale Some 'toStream' implementations change the state of 'std::ostream' (#3079)**
by @andiwand, updated on 2024-05-04
- ▶  **Stale HepMC plugin looks incomplete (#3050)**
by @andiwand, updated on 2024-04-26
- ▶  **Stale 'EigenStepper' (and extensions) cannot be easily extended for dense environment covariance transport (#2868)**
by @andiwand, updated on 2024-03-20
- ▶  **Stale 'Stepper' and 'Navigator' cannot be configured by 'PropagatorOptions' (#2861)**
by @andiwand, updated on 2024-02-09
- ▶  **Stale Fitters use 'PropagatorPlainOptions' and not 'PropagatorOptions' (#2862)**
by @andiwand, updated on 2024-02-09

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- ▶  Stale **'AdaptiveGridTrackDensity'** has a hidden **'d0'** cut (#2840)
by @andiwand, updated on 2024-01-17
- ▶  Stale **Duplication in 'AdaptiveGridTrackDensity' and 'GaussianGridTrackDensity'** (#2841)
by @andiwand, updated on 2024-01-17
- ▶  Stale **EDM4hep parameter conversion should use jacobians directly** (#2813)
by @paulgessinger, updated on 2024-01-11
- ▶  Stale **'Surface::boundToFreeJacobian'** could also use **'FreeVector'** parameters (#2810)
by @andiwand, updated on 2024-01-10
- ▶  Stale **Telescope detector cookbook** (#2800)
by @paulgessinger, updated on 2024-01-10
- ▶  Stale **Write CKF documentation** (#2794)
by @paulgessinger, updated on 2024-01-10
- ▶  Stale **Add description of Blueprint tree and how it can be used to create layerless detector.** (#2785)
by @paulgessinger, updated on 2024-01-10
- ▶  Stale **'SurfaceReached'** aborter is messing with the step size (#2738)
by @andiwand, updated on 2023-12-28

- ▶  **Stale** **Propagation state cannot be initialized outside the propagation (#2736)**
by @andiwand, updated on 2023-12-28
- ▶  **Stale** **FPE: AMVF keepNewVertex (#2590)**
by @andiwand, updated on 2023-11-26
- ▶  **Stale** **Track finding rework (#2320)**
by @paulgessinger, updated on 2023-11-11
- ▶  **Stale** **Propagator step count limit reached and Step size adjustment exceeds maximum trials (#2469)**
by @CarloVarni, updated on 2023-11-11
- ▶  **Stale** **[Feature Request] Reference surface for tracking algorithm is hardcoded to be at origin (#2525)**
by @janheinri, updated on 2023-11-09
- ▶  **Stale** **Incorrect material interaction in backward propagation ? (#2429)**
by @Corentin-Allaire, updated on 2023-10-06
- ▶  **Stale** **Expand TrackingGeometry building from DD4hep with user given input (#2403)**
by @asalzburger, updated on 2023-09-27









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- ▶  **Stale FPE: Bethe-Heitler gamma_distribution (#2346)**
by @paulgessinger, updated on 2023-09-03
- ▶  **Stale FPE: GaussianMixtureReduction (#2347)**
by @paulgessinger, updated on 2023-09-03
- ▶  **Stale Inconsistent use of 'VolumeMaterialInteraction' thickness (#2279)**
by @andiwand, updated on 2023-08-05
- ▶  **Stale Move some Digitization code from FATRAS to Core? (#2230)**
by @benjaminhuth, updated on 2023-07-28
- ▶  **Stale MultiTrajectory buffer default constructible (#2154)**
by @tboldagh, updated on 2023-07-20
- ▶  **Stale Track nDoF only returns the sum of calibrated size and not the actual DoFs. (#2076)**
by @pbutti, updated on 2023-06-22
- ▶  **Stale Track parameter estimation algorithm return parameter on the first seed SP surface (#2037)**
by @Corentin-Allaire, updated on 2023-05-25
- ▶  **Stale Expose individual steps of track reconstruction in full_chain python scripts (#1997)**
by @tboldagh, updated on 2023-05-20









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- ▶  **Stale Different results for full_chain_itk when running locally vs Ixplus (#1819)**
by @CarloVarni, updated on 2023-05-09
- ▶  **Stale Bug: Probable Issues in Bevelled Cylinder Implementation (#1238)**
by @rahmans1, updated on 2023-05-09
- ▶  **Stale Physmon throws many WARNINGS on Bethe-Heitler approximation (#1748)**
by @paulgessinger, updated on 2023-05-09
- ▶  **Stale SpacePoint EDM design (#1971)**
by @CarloVarni, updated on 2023-05-09
- ▶  **Stale vertex fitting and duplicate tracks (#1992)**
by @rubihason, updated on 2023-05-09
- ▶  **Stale Estimate Track Parameters from Seeds use only one surface. What about strips? (#1895)**
by @CarloVarni, updated on 2023-05-09
- ▶  **Stale Bug: Unpredicable navigation in layer with overlapping surface (#1852)**
by @Corentin-Allaire, updated on 2023-03-25
- ▶  **Stale Make central minimum track momentum threshold (#1761)**
by @paulgessinger, updated on 2023-01-21

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- ▶  **Stale Optimal seeding parameters for a detector (#1699)**
by @CouthuresJeremy, updated on 2023-01-05
- ▶  **Stale Particle smearing assertion with Geant4 (#1603)**
by @benjaminhuth, updated on 2022-12-21
- ▶  **Stale Documentation update: Examples (#1420)**
by @paulgessinger, updated on 2022-11-23
- ▶  **Stale Documentation update: How-to (core) (#1422)**
by @paulgessinger, updated on 2022-11-23
- ▶  **Stale Documentation update: Plugins (#1421)**
by @paulgessinger, updated on 2022-10-22
- ▶  **Stale Vertexing produces vertex candidates that are unreasonable (#1361)**
by @paulgessinger, updated on 2022-10-22
- ▶  **Stale Optionally have the vertex finding recalculate perigee parameters relative to consistent reference (#1482)**
by @paulgessinger, updated on 2022-10-01
- ▶  **Stale Ambiguous perigees with low momentum (#1386)**
by @andiwand, updated on 2022-09-20

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- ▶  **Stale** **Fatras: Bethe-Heitler calculation wrong?** (#1437)
by @asalzburger, updated on 2022-09-20
- ▶  **Stale** **Some writers performs their writes in the destructor** (#881)
by @paulgessinger, updated on 2022-08-11
- ▶  **Stale** **Magnetic Field Storage** (#1239)
by @osbornjd, updated on 2022-06-12
- ▶  **Stale** **Cut tube segment dd4hep conversion tests** (#1146)
by @rahmans1, updated on 2022-05-25
- ▶  **Stale** **Bug: issue on first build after DD4hep update on system with globally installed acts** (#1139)
by @gagnonlg, updated on 2022-02-22
- ▶  **Stale** **Should seed finding tools have a higher-level interface?** (#988)
by @stephenswat, updated on 2021-11-25
- ▶  **Stale** **Improvement: Estimate track parameters from seed at perigee surface** (#1036)
by @XiaocongAi, updated on 2021-11-10
- ▶  **Stale** **Tracking for TPC/DC without surfaces** (#165)
by @FabianKlimpel, updated on 2021-11-04

- ▶  **Stale BoundingBox tests fail on double precision (#752)**
by @paulgessinger, updated on 2021-11-04