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October 29, 2024









acts-project/acts: PRs merged between 2024-10-22 and 2024-10-29 |














- ▶  **ci: Download dependencies as tarball (#3520)**
by @paulgessinger,  reviewed by @andiwand, merged on 2024-10-22
- ▶  **ci: Reset 'ccache' caches (#3771)**
by @andiwand,  reviewed by @paulgessinger, merged on 2024-10-22
- ▶  **fix: Make 'DataHandle' type check more robust (#3768)**
by @andiwand,  reviewed by @paulgessinger, merged on 2024-10-22
- ▶  **test: Reduce logging amount in fitter unit tests (#3772)**
by @andiwand,  reviewed by @AJPfleger, merged on 2024-10-22
- ▶  **chore: Fix license header in pre commit hooks (#3773)**
by @andiwand,  reviewed by @AJPfleger, merged on 2024-10-22
- ▶  **feat: Add tracking efficiency vs z0 (#3764)**
by @ntadej,  reviewed by @andiwand, merged on 2024-10-22
- ▶  **feat: Add 'AngleHelpers.hpp' to help with eta/theta conversions (#3767)**
by @andiwand,  reviewed by @paulgessinger, merged on 2024-10-22
- ▶  **chore: update exclude list for unused files (#3776)**
by @AJPfleger,  reviewed by @dimitra97, merged on 2024-10-23

acts-project/acts: PRs merged between 2024-10-22 and 2024-10-29 II

















- ▶  **fix: Improve 'TrackParameterHelpers.hpp' (#3766)**
by @andiwand,  reviewed by @AJPfleger, merged on 2024-10-24
- ▶  **feat(nav): Gen3 Navigation policies and factory (#3760)**
by @paulgessinger,  reviewed by @andiwand, merged on 2024-10-24
- ▶  **chore: Tweak DD4hep log level (#3778)**
by @andiwand,  reviewed by @paulgessinger, merged on 2024-10-24
- ▶  **refactor: Rework random parameter and covariance generation (#3777)**
by @andiwand,  reviewed by @paulgessinger, merged on 2024-10-24
- ▶  **build: Unconditionally load Boost in CMake config (#3779)**
by @stephenswat,  reviewed by @paulgessinger, merged on 2024-10-24
- ▶  **ci: Bump dependency tarball version to v5 (#3782)**
by @paulgessinger,  reviewed by @andiwand, merged on 2024-10-26
- ▶  **ci: dependency URL not set correctly (#3786)**
by @AJPfleger,  reviewed by @paulgessinger, merged on 2024-10-27
- ▶  **chore(tests): brush over surface tests (#3783)**
by @AJPfleger,  reviewed by @andiwand, merged on 2024-10-27

acts-project/acts: PRs merged between 2024-10-22 and 2024-10-29 III














- ▶  **refactor: replace 'fabs(' and 'sqrtf(' with 'std::abs' and 'std::sqrt(' (#3787)**
by @AJPfleger,  reviewed by @paulgessinger, merged on 2024-10-27
- ▶  **fix: Make callable args universal references (#3789)**
by @paulgessinger,  reviewed by @benjaminhuth, merged on 2024-10-28
- ▶  **fix: Remove a number of Sonar issues (#3780)**
by @paulgessinger,  reviewed by @benjaminhuth, merged on 2024-10-28
- ▶  **feat: Validate track parameters (#3756)**
by @andiwand,  reviewed by @paulgessinger, merged on 2024-10-29

- ▶  **feat: Log-uniform p/pt distributions for Examples (#3790)**
by @andiwand,  **no reviewer**, updated on 2024-10-29
- ▶  **refactor: Allow track selection without reference surface (#3791)**
by @benjaminhuth,  comment by @benjaminhuth, updated on 2024-10-28
- ▶  **refactor: FPE safe eta/theta conversion (#3788)**
by @andiwand, review requested, updated on 2024-10-28
- ▶  **refactor: use mathematical constants from 'std::numbers' (#3781)**
by @AJPfleger, review requested, updated on 2024-10-28
- ▶  **Stale refactor: Move MLAmbiguitySolver to Core (#3272)**
by @Corentin-Allaire,  comment by @Corentin-Allaire, updated on 2024-10-27
- ▶  **feat: ProxyAccessor constructor can now be constexpr (#3757)**
by @timadye, review requested, updated on 2024-10-27
- ▶  **Stale feat: tracc plugin refactor, tracc chain reconstruction only, and fixes (#3505)**
by @fredevb,  **no reviewer**, updated on 2024-10-27
- ▶  **fix: protect TrackSelector against eta=nan (#3785)**
by @timadye,  **no reviewer**, updated on 2024-10-26




















acts-project/acts: Open PRs II

- ▶  **feat: Add standalone digitization coordinates converter (#3765)**
by @ntadej,  comment by @paulgessinger, updated on 2024-10-24
- ▶  **ci: Enable standard library assertions in debug builds (#3759)**
by @benjaminhuth,  comment by @benjaminhuth, updated on 2024-10-24
- ▶  **chore: Update PR template, add cut-off marker (#3741)**
by @paulgessinger,  reviewed by @AJPfleger, updated on 2024-10-18
- ▶  **feat: bump de tray version, add material tracer (#3755)**
by @asalzburger,  **no reviewer**, updated on 2024-10-17
- ▶  **feat: Conversion and chain code in tracc (#3656)**
by @stephenswat,  comment by @asalzburger, updated on 2024-10-15
- ▶  **ci: Reenable some ExaTrkX tests (#3395)**
by @benjaminhuth,  **no reviewer**, updated on 2024-10-11
- ▶  **feat: Add a fastjet plugin (#3617)**
by @gagnonlg,  **no reviewer**, updated on 2024-10-10
- ▶  **fix!: Use 'ActsScalar' in binning tools (#3482)**
by @stephenswat,  comment by @stephenswat, updated on 2024-10-04





















acts-project/acts: Open PRs III

- ▶  **Stale** **fix: Require TBB to be found by cmake (#3507)**
by @benjaminhuth,  reviewed by @timadye, updated on 2024-09-21
- ▶  **Stale** **feat: GeoShapes to DetectorVolumes and GeoMaterial Converters (#3268)**
by @Matthewharri,  comment by @Matthewharri, updated on 2024-09-18
- ▶  **Stale** **feat: allow bare Surface pointers to be written to JSON (#3493)**
by @asalzburger,  comment by @paulgessinger, 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
- ▶  **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





















acts-project/acts: Open PRs IV

- ▶  **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 @asalzburger,  **no reviewer**, updated on 2024-06-15
- ▶   **WIP** fix: **Do not use requires in class EDM definition** (#3731)
by @CarloVarni,  **no reviewer**, updated on 2024-10-29
- ▶   **WIP** refactor: **Replace 'ParticleSmearing' with 'TrackParameterSmearing' in Examples** (#3784)
by @andiwand,  **no reviewer**, updated on 2024-10-29
- ▶   **WIP** refactor: **Rework detector handling in Examples** (#3498)
by @andiwand,  **no reviewer**, updated on 2024-10-25
- ▶   **WIP** feat: **Adding G4Trap converter in Geant4Converters** (#3775)
by @ldamenti,  comment by @ldamenti, updated on 2024-10-25
- ▶   **WIP** ci: **Add check for mathematical constants (no macros)** (#3774)
by @AJPfleger,  **no reviewer**, updated on 2024-10-24
























acts-project/acts: Open PRs ▼

- ▶   **WIP** Stale refactor: **Bump min json ver, make json keys static** (#2968)
by @paulgessinger, review requested, updated on 2024-10-24
- ▶   **WIP** refactor(gx2f): **make material work for $|\text{eta}| > 2$** (#3726)
by @AJPflegler,  **no reviewer**, updated on 2024-10-23
- ▶   **WIP** refactor!: **explicit constructors** (#3762)
by @AJPflegler,  **no reviewer**, updated on 2024-10-23
- ▶   **WIP** fix: **resurrect 'ActsScalar' with 'float'** (#3754)
by @AJPflegler,  comment by @AJPflegler, updated on 2024-10-21
- ▶   **WIP** Stale refactor: **reduce complexity of highly nested blocks** (#3633)
by @AJPflegler,  comment by @andiwand, updated on 2024-10-20
- ▶   **WIP** refactor: **modernise map utils** (#3615)
by @AJPflegler,  comment by @AJPflegler, updated on 2024-10-18
- ▶   **WIP** refactor: **Add helper for Transform inversion** (#3750)
by @paulgessinger,  **no reviewer**, updated on 2024-10-17






















acts-project/acts: Open PRs VI









- ▶   **WIP feat: Add 'noexcept' specifier to 'Acts::Any' (#3743)**
by @benjaminhuth, review requested, updated on 2024-10-16
- ▶   **WIP refactor!: Middle range strategy (#3719)**
by @CarloVarni,  comment by @paulgessinger, updated on 2024-10-14
- ▶   **WIP refactor!: Seed Finders create collection of 'Seed<external_spacepoint_t>' instead of 'Seed<Proxy<external_spacepoint_t>'** (#3729)
by @CarloVarni,  **no reviewer**, updated on 2024-10-13
- ▶   **WIP refactor: Some internal GSF refactorings (#2697)**
by @benjaminhuth,  changes requested by @andiwand, updated on 2024-10-10
- ▶   **WIP refactor(material)!: update slabs from 'float' to 'ActsScalar' (#3609)**
by @AJPfleger,  **no reviewer**, updated on 2024-10-08
- ▶   **WIP Stale refactor!: Decouple navigation and stepping (#3449)**
by @andiwand,  **no reviewer**, updated on 2024-10-06
- ▶   **WIP refactor!: Clean track EDM projector (#3605)**
by @andiwand,  **no reviewer**, updated on 2024-10-04

acts-project/acts: Open PRs VII
















- ▶   **WIP**  **Stale** **feat: detray plugin surface grids (#3429)**
by @EleniXoch,  comment by @EleniXoch, updated on 2024-10-04
- ▶   **WIP** **chore: Bump minimum boost version to 1.78.0 (#3517)**
by @paulgessinger,  **no reviewer**, updated on 2024-10-02
- ▶   **WIP**  **Stale** **feat: Adding efficiency vs production radius to output root files (#3539)**
by @AichaMattouhi,  comment by @paulgessinger, updated on 2024-09-28
- ▶   **WIP**  **Stale** **refactor: Detector Element refactoring proposal (#3574)**
by @benjaminhuth,  comment by @asalzburger, updated on 2024-09-28
- ▶   **WIP**  **Stale** **feat: Add statistics to propagation (#3450)**
by @andiwand,  comment by @paulgessinger, updated on 2024-09-21
- ▶   **WIP**  **Stale** **draft: Gauss vertex seeding with time (#3491)**
by @CENcll,  comment by @andiwand, updated on 2024-09-21

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 **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

- ▶  **Stale** **Common shared measurement computation?** (#3618)
by @gagnonlg, updated on 2024-10-26
- ▶  **Stale** **feat: tracc plugin refactor, tracc chain reconstruction only, and fixes** (#3505)
by @fredevb,  **no reviewer**, updated on 2024-10-27
- ▶  **Stale** **refactor: Move MLAmbiguitySolver to Core** (#3272)
by @Corentin-Allaire,  **no reviewer**, updated on 2024-10-27
- ▶   **Stale** **refactor: Bump min json ver, make json keys static** (#2968)
by @paulgessinger,  **no reviewer**, updated on 2024-10-24





















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

- ▶  **Stale** refactor: **Move MLAmbiguitySolver to Core** (#3272)
by @Corentin-Allaire,  **no reviewer**, updated on 2024-10-27
- ▶  **Stale** feat: **tracc plugin refactor, tracc chain reconstruction only, and fixes** (#3505)
by @fredevb,  **no reviewer**, updated on 2024-10-27
- ▶  **Stale** **Common shared measurement computation?** (#3618)
by @gagnonlg, updated on 2024-10-26
- ▶   **Stale** refactor: **Bump min json ver, make json keys static** (#2968)
by @paulgessinger,  **no reviewer**, updated on 2024-10-24
- ▶   **Stale** refactor: **reduce complexity of highly nested blocks** (#3633)
by @AJPfleger,  **no reviewer**, updated on 2024-10-20
- ▶  **Stale** **Bug: Example Framework does not compile in an environment without TBB** (#3610)
by @tomeichlersmith, updated on 2024-10-13
- ▶   **Stale** refactor!: **Decouple navigation and stepping** (#3449)
by @andiwand,  **no reviewer**, updated on 2024-10-06














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

- ▶   **WIP** **Stale** **feat: detray plugin surface grids (#3429)**
by @EleniXoch,  **no reviewer**, updated on 2024-10-04
- ▶   **WIP** **Stale** **feat: Adding efficiency vs production radius to output root files (#3539)**
by @AichaMattouhi,  **no reviewer**, updated on 2024-09-28
- ▶   **WIP** **Stale** **refactor: Detector Element refactoring proposal (#3574)**
by @benjaminhuth,  **no reviewer**, updated on 2024-09-28
- ▶  **Stale** **TrackAtVertex trackWeight is not being written in IVF (#2149)**
by @andiwand, updated on 2024-09-27
- ▶  **Stale** **Multiple context references are in flight for track fitters and finder (#3383)**
by @andiwand, updated on 2024-09-27
- ▶  **Stale** **'TrackStateType' is easy to get wrong (#3439)**
by @andiwand, updated on 2024-09-26
- ▶  **Stale** **Cleanup: BinningValue, AxisBounds + detray/Integration (#3549)**
by @asalzbunger, updated on 2024-09-25


















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

- ▶   **WIP**  **Stale** **feat: Add statistics to propagation (#3450)**
by @andiwand,  **no reviewer**, updated on 2024-09-21
- ▶   **WIP**  **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 @stephswat, 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** **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 IV

- ▶  **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
- ▶  **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
- ▶  **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









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









- ▶  **Stale** refactor: **Lift GenericDetector to a Plugin** (#3425)
by @benjaminhuth,  **no reviewer**, updated on 2024-08-21
- ▶   **Stale** refactor: **Rework physics performance monitoring for Examples** (#3359)
by @andiwand,  **no reviewer**, updated on 2024-08-17
- ▶   **Stale** refactor: **Move config files from ODD to Acts to ensure compatibility** (#3407)
by @benjaminhuth,  **no reviewer**, updated on 2024-08-17
- ▶   **Stale** build: **physmon for tracc chains (host and cuda)** (#3403)
by @fredevb,  **no reviewer**, updated on 2024-08-16
- ▶   **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

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











- ▶   **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 VII









- ▶  **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 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
- ▶  **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
- ▶  Stale **Detailed timing per event (#1700)**
by @CouthuresJeremy, updated on 2024-05-25









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

- ▶   **WIP** 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
- ▶  Stale **bug: some dependencies in setup script wrong (#3014)**
by @AJPfleger, updated on 2024-05-17








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- ▶  **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
- ▶  **Stale 'AdaptiveGridTrackDensity' has a hidden 'd0' cut (#2840)**
by @andiwand, updated on 2024-01-17









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- ▶  **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

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- ▶  **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
- ▶  **Stale FPE: Bethe-Heitler gamma_distribution (#2346)**
by @paulgessinger, updated on 2023-09-03








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- ▶  **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
- ▶  **Stale Different results for full_chain_itk when running locally vs lplus (#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 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: Unpredictable 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
- ▶  **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

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- ▶  **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
- ▶  **Stale Fatras: Bethe-Heitler calculation wrong? (#1437)**
by @asalzbürger, 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