Pull request and issue summary for acts-project/acts

August 13, 2024

acts-project/acts: PRs merged between 2024-08-06 and 2024-08-13 I

- ► **build: Improve traccc dependency loading** (#3478)
  by @stephenswat, ✅ reviewed by @andiwand, merged on 2024-08-06

- ► **feat: Decouple SurfaceAccessor from source link implementations** (#3445)
  by @ssdetlab, ✅ reviewed by @andiwand, merged on 2024-08-06

- ► **fix: Really handle holes after measurement selection in Core CKF** (#3474)
  by @andiwand, ✅ reviewed by @goetzgaycken, merged on 2024-08-07

- ► **refactor: Split 'GainMatrixUpdater' compilation** (#3486)
  by @paulgessinger, ✅ reviewed by @andiwand, merged on 2024-08-07

- ► **ci: Fix 'build_performance' GitHub CI job after #3135** (#3487)
  by @andiwand, ✅ reviewed by @paulgessinger, merged on 2024-08-07

- ► **feat(util): Grid type-erased output and comparisons** (#3469)
  by @paulgessinger, ✅ reviewed by @asalzburger, merged on 2024-08-07

- ► **perf: Optimize SourceLink creation, track state assignment** (#3466)
  by @paulgessinger, ✅ reviewed by @andiwand, merged on 2024-08-07

- ► **refactor(geometry): Surface merging returns ordering** (#3468)
  by @paulgessinger, ✅ reviewed by @andiwand, merged on 2024-08-08

acts-project/acts: PRs merged between 2024-08-06 and 2024-08-13 II

- ▶ 🔀 **refactor: Remove dfelibs from dependencies** (#3489)
  by @paulgessinger, ✅ reviewed by @andiwand, merged on 2024-08-08

- ▶ 🔀 **ci: Rework physmon chains** (#3460)
  by @andiwand, ✅ reviewed by @paulgessinger, merged on 2024-08-08

- ▶ 🔀 **feat: Variable size measurement for Examples** (#3107)
  by @andiwand, ✅ reviewed by @paulgessinger, merged on 2024-08-08

- ▶ 🔀 **ci: Use pre-commit for CI lint** (#3464)
  by @paulgessinger, ✅ reviewed by @andiwand, merged on 2024-08-08

- ▶ 🔀 **feat: change propagation algorithm to particle gun input** (#3462)
  by @asalzburger, ✅ reviewed by @andiwand, merged on 2024-08-09

- ▶ 🔀 **chore: Bump clang-format to v18.1.8** (#3496)
  by @paulgessinger, ✅ reviewed by @stephenswat, merged on 2024-08-09

- ▶ 🔀 **fix: Minor fixes to detray and traccc plugins** (#3483)
  by @stephenswat, ✅ reviewed by @andiwand, merged on 2024-08-09

- ▶ 🔀 **refactor: change the definition of the rotation parameters** (#2021)
  by @XiaocongAi, ✅ reviewed by @paulgessinger, merged on 2024-08-12

▶ ⌥ **feat(geometry): 'RegularSurface' gets direction-less 'isOnSurface'** (#3500)
by @paulgessinger, ✅ reviewed by @benjaminhuth, merged on 2024-08-12

acts-project/acts: Open PRs I

- ▶ 🔀 **refactor: Split 'KalmanVertexUpdater' by dimension** (#3503)
  by @paulgessinger, ✅ reviewed by @benjaminhuth, updated on 2024-08-13

- ▶ 🔀 **ci: bump histcmp to 0.6.7 to try to fix yerr issue** (#3504)
  by @paulgessinger, review requested, updated on 2024-08-13

- ▶ 🔀 **chore: Add cmake-format to pre-commit** (#3497)
  by @paulgessinger, ✅ comment by @paulgessinger, updated on 2024-08-13

- ▶ 🔀 **feat: Hashing seeding algorithm** (#3148)
  by @CouthuresJeremy, ✅ comment by @CouthuresJeremy, updated on 2024-08-12

- ▶ 🔀 **fix: Ensure ODD cleanup if sequencer stops in Examples Python tests** (#3471)
  by @andiwand, ✅ comment by @andiwand, updated on 2024-08-11

- ▶ 🔀 Stale **refactor: Move MLAmbiguitySolver to Core** (#3272)
  by @Corentin-Allaire, ⚠️ **no reviewer**, updated on 2024-08-10

- ▶ 🔀 **refactor!: SourceLink setting only via rvalue reference** (#3488)
  by @paulgessinger, ⚠️ **no reviewer**, updated on 2024-08-09

- ▶ 🔀 **fix: make material validity checks and construction explicit** (#3494)
  by @AJPfleger, ✅ comment by @AJPfleger, updated on 2024-08-09

acts-project/acts: Open PRs II

- ▶ 🔀 **feat: Max chi2 for outlier for Core 'MeasurementSelector'** (#3475)
  by @andiwand, ✅ comment by @andiwand, updated on 2024-08-09

- ▶ 🔀 **fix!: Use 'ActsScalar' in binning tools** (#3482)
  by @stephenswat, ✅ comment by @stephenswat, updated on 2024-08-09

- ▶ 🔀 **refactor: Add C++20 navigator and stepper concepts** (#3492)
  by @stephenswat, ✅ reviewed by @paulgessinger, updated on 2024-08-08

- ▶ 🔀 **feat: allow bare Surface pointers to be written to JSON** (#3493)
  by @asalzburger, ✅ comment by @paulgessinger, updated on 2024-08-08

- ▶ 🔀 **feat: Telescope style seeding** (#3300)
  by @ssdetlab, ✅ comment by @ssdetlab, updated on 2024-08-07

- ▶ 🔀 **refactor: Bump min json ver, make json keys static** (#2968)
  by @paulgessinger, review requested, updated on 2024-08-07

- ▶ 🔀 **refactor: Change track parameter concepts to C++20** (#3485)
  by @stephenswat, ✅ reviewed by @andiwand, updated on 2024-08-06

- ▶ 🔀 **refactor: Remove uses of 'std::enable_if'** (#3484)
  by @stephenswat, ✅ comment by @paulgessinger, updated on 2024-08-06

acts-project/acts: Open PRs III

- ▶ 🔀 **feat: GeoShapes to DetectorVolumes and GeoMaterial Converters** (#3268)
  by @Matthewharri, ✅ comment by @Matthewharri, updated on 2024-08-06

- ▶ 🔀 **ci: Enable traccc and friends in CI builds** (#3480)
  by @stephenswat, ⚠️ **no reviewer**, updated on 2024-08-06

- ▶ 🔀 **feat: Add covfie magnetic field plugin** (#3479)
  by @stephenswat, ⚠️ **no reviewer**, updated on 2024-08-06

- ▶ 🔀 **feat: Separate external and measurement surfaces** (#3454)
  by @ssdetlab, ✅ comment by @andiwand, updated on 2024-08-03

- ▶ 🔀 **refactor: path handling to use `std::filesystem`** (#3308)
  by @AJPfleger, ❌ changes requested by @stephenswat, updated on 2024-08-02

- ▶ 🔀 **feat: traccc plugin (conversion)** (#3281)
  by @fredevb, ✅ comment by @paulgessinger, updated on 2024-08-01

- ▶ 🔀 **fix: detray plugin (cmake flags, CI, and compile errors)** (#3363)
  by @fredevb, ✅ comment by @EleniXoch, updated on 2024-08-01

- ▶ 🔀 **feat: covfie plugin** (#3117)
  by @fredevb, ✅ comment by @paulgessinger, updated on 2024-08-01

acts-project/acts: Open PRs IV

- ⑂ **refactor: Accelerating the Hough Transform** (#3461)
  by @dimitra97, ✅ comment by @goblirsc, updated on 2024-08-01

- ⑂ **feat!: (fix + chore) streamline nSegments usage** (#3419)
  by @asalzburger, ✅ comment by @asalzburger, updated on 2024-07-29

- ⑂ `Stale` **fix: update the DD4hep requirements when the ODD is built** (#3330)
  by @Corentin-Allaire, ✅ comment by @Corentin-Allaire, updated on 2024-07-28

- ⑂ **feat: speed up detector navigator** (#3435)
  by @asalzburger, ✅ reviewed by @andiwand, updated on 2024-07-25

- ⑂ **feat!: Track-EDM like implementation for the space points, to be used in the seeding** (#3432)
  by @CarloVarni, ⚠️ **no reviewer**, updated on 2024-07-24

- ⑂ **feat: Introduce the usage of the geomodel converters for the Muon System** (#3348)
  by @dimitra97, ✅ comment by @dimitra97, updated on 2024-07-24

- ⑂ **ci: Reenable some ExaTrkX tests** (#3395)
  by @benjaminhuth, ⚠️ **no reviewer**, updated on 2024-07-23

- ⑂ **refactor: Lift GenericDetector to a Plugin** (#3425)
  by @benjaminhuth, review requestedreview requested, updated on 2024-07-22

acts-project/acts: Open PRs V

- ▶ 🔀 `Stale` **style: Update clang-format to v18** (#3319)
  by @stephenswat, ⚠️ **no reviewer**, updated on 2024-07-21

- ▶ 🔀 **feat: traccc chain in examples (common chain logic and CPU chain)** (#3320)
  by @fredevb, ⚠️ **no reviewer**, updated on 2024-07-16

- ▶ 🔀 `Stale` **feat: Misalignment shift and test check that only selected modules are shifted** (#2843)
  by @LaraCalic, ✅ comment by @paulgessinger, updated on 2024-07-15

- ▶ 🔀 `Stale` **feat: Geometry agnostic space point maker** (#2890)
  by @Alonl14, ⚠️ **no reviewer**, updated on 2024-07-06

- ▶ 🔀 `Stale` **feat: introduction obj simhit writer** (#3180)
  by @asalzburger, ⚠️ **no reviewer**, updated on 2024-06-15

- ▶ 🔀 `🚧 WIP` **chore: Bump minimum GeoModel version to 6.3.0** (#3476)
  by @andiwand, ✅ comment by @andiwand, updated on 2024-08-13

- ▶ 🔀 `🚧 WIP` **feat(gx2f): material effects - multiple scattering** (#3292)
  by @AJPfleger, ⚠️ **no reviewer**, updated on 2024-08-13

acts-project/acts: Open PRs VI

- ⛙ 🚧 WIP **feat: Gen3 geometry Portals** (#3501)
  by @paulgessinger, ⚠️ **no reviewer**, updated on 2024-08-12

- ⛙ 🚧 WIP **fix(gx2f): use all states for 'jacobianFromStart'** (#3274)
  by @AJPfleger, ⚠️ **no reviewer**, updated on 2024-08-11

- ⛙ 🚧 WIP **fix: Return 'nullptr' if outside tracking geometry in 'TrackingGeometry::lowestTrackingVolume'** (#3481)
  by @andiwand, ✅ comment by @andiwand, updated on 2024-08-09

- ⛙ 🚧 WIP **chore: Update compiler warning flags** (#3495)
  by @paulgessinger, ✅ reviewed by @stephenswat, updated on 2024-08-09

- ⛙ 🚧 WIP **refactor: Rework detector handling in Examples** (#3498)
  by @andiwand, ⚠️ **no reviewer**, updated on 2024-08-08

- ⛙ 🚧 WIP **refactor: Return all track states from Core CKF** (#3391)
  by @andiwand, ⚠️ **no reviewer**, updated on 2024-08-08

- 🚧 WIP **feat: GeoModelDetectorObjectFactory for flexible conversion of GeoModel objects to Acts Surfaces and Volumes** (#3499)
  by @Berggren-Jonas, ⚠ **no reviewer**, updated on 2024-08-08

- 🚧 WIP **feat: Allow volume constrain for propagation** (#3470)
  by @andiwand, ⚠ **no reviewer**, updated on 2024-08-08

- 🚧 WIP **feat: Renavigation for Gen1** (#3437)
  by @andiwand, ⚠ **no reviewer**, updated on 2024-08-08

- 🚧 WIP **refactor: Remove target volume estimation from 'Navigator'** (#3242)
  by @andiwand, ⚠ **no reviewer**, updated on 2024-08-07

- 🚧 WIP **refactor!: Template algorithms on track container frontend 'TrackContainer'** (#3193)
  by @andiwand, ✅ comment by @andiwand, updated on 2024-08-07

- 🚧 WIP **draft: Gauss vertex seeding with time** (#3491)
  by @CENcll, ⚠ **no reviewer**, updated on 2024-08-07

acts-project/acts: Open PRs VIII

- ▶ 🔀 🚧 WIP **refactor: Remove 'forceIntersectBoundaries' from 'Navigator'** (#3238)
  by @andiwand, ✅ comment by @noemina, updated on 2024-08-06

- ▶ 🔀 🚧 WIP **test: Check if we end up in the expected volume in Gen1 'Navigator'** (#3442)
  by @andiwand, ⚠️ **no reviewer**, updated on 2024-08-06

- ▶ 🔀 🚧 WIP **feat: Add statistics to propagation** (#3450)
  by @andiwand, ✅ comment by @paulgessinger, updated on 2024-08-05

- ▶ 🔀 🚧 WIP **feat(geometry): Allow operator« on surfaces without detector elements** (#3467)
  by @paulgessinger, ✅ comment by @paulgessinger, updated on 2024-08-01

- ▶ 🔀 🚧 WIP **refactor: Rework projector** (#3453)
  by @andiwand, ✅ comment by @paulgessinger, updated on 2024-08-01

- ▶ 🔀 🚧 WIP **refactor: Generalize propagation validation in Examples** (#3434)
  by @andiwand, ❌ changes requested by @asalzburger, updated on 2024-07-31

- ▶ 🔀 🚧 WIP **example of LRT** (#3446)
  by @AichaMattouhi, ✅ comment by @delitez, updated on 2024-07-31

acts-project/acts: Open PRs IX

- 🔀 **WIP** **perf: Drop 'stateBuffer' from Core CKF** (#3458)
  by @andiwand, ⚠️ **no reviewer**, updated on 2024-07-31

- 🔀 **WIP** **feat: Build ITk with Gen1 geometry and geomodel** (#3448)
  by @benjaminhuth, ✅ comment by @benjaminhuth, updated on 2024-07-30

- 🔀 **WIP** **refactor!: Decouple navigation and stepping** (#3449)
  by @andiwand, ⚠️ **no reviewer**, updated on 2024-07-28

- 🔀 **WIP** **feat: detray plugin surface grids** (#3429)
  by @EleniXoch, ⚠️ **no reviewer**, updated on 2024-07-23

- 🔀 **WIP** **feat: Added possibility to keep intermediate particles from PythiaGenerator WIP** (#3414)
  by @pbutti, ⚠️ **no reviewer**, updated on 2024-07-23

- 🔀 **WIP** **refactor: add geohook for fast digitization range selection to itk example** (#2089)
  by @niermann999, ⚠️ **no reviewer**, updated on 2024-07-23

acts-project/acts: Open PRs X

- ▶ 🚧 **WIP** Stale **refactor!: Surface returns transform by value** (#2527)
  by @asalzburger, ⚠️ **no reviewer**, updated on 2024-07-22

- ▶ 🚧 **WIP** Stale **refactor: Some internal GSF refactorings** (#2697)
  by @benjaminhuth, ❌ changes requested by @andiwand, updated on 2024-07-21

- ▶ 🚧 **WIP** **refactor: Move config files from ODD to Acts to ensure compatibility** (#3407)
  by @benjaminhuth, ⚠️ **no reviewer**, updated on 2024-07-18

- ▶ 🚧 **WIP** **refactor: Rework physics performance monitoring for Examples** (#3359)
  by @andiwand, ⚠️ **no reviewer**, updated on 2024-07-18

- ▶ 🚧 **WIP** **build: physmon for traccc chains (host and cuda)** (#3403)
  by @fredevb, ⚠️ **no reviewer**, updated on 2024-07-17

- ▶ 🚧 **WIP** **feat: traccc cuda example** (#3372)
  by @fredevb, ⚠️ **no reviewer**, updated on 2024-07-17

- ▶ 🚧 **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

- ⊙ **Gen3 geometry** (#3502)
  by @paulgessinger, updated on 2024-08-09

- ⤷ `Stale` **refactor: Move MLAmbiguitySolver to Core** (#3272)
  by @Corentin-Allaire, ⚠ **no reviewer**, updated on 2024-08-10

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

- ▶ ⑂ `Stale` **refactor: Move MLAmbiguitySolver to Core** (#3272)
  by @Corentin-Allaire, ⚠ **no reviewer**, updated on 2024-08-10

- ▶ ⑂ `Stale` **fix: update the DD4hep requirements when the ODD is built** (#3330)
  by @Corentin-Allaire, ⚠ **no reviewer**, updated on 2024-07-28

- ▶ ⊙ `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!: Surface returns transform by value** (#2527)
  by @asalzburger, ⚠ **no reviewer**, updated on 2024-07-22

- ▶ ⑂ `WIP` `Stale` **refactor: Some internal GSF refactorings** (#2697)
  by @benjaminhuth, ⚠ **no reviewer**, updated on 2024-07-21

- ▶ ⑂ `Stale` **style: Update clang-format to v18** (#3319)
  by @stephenswat, ⚠ **no reviewer**, updated on 2024-07-21

- ▶ ⑂ `Stale` **feat: Misalignment shift and test check that only selected modules are shifted** (#2843)
  by @LaraCalic, ⚠ **no reviewer**, updated on 2024-07-15

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

- ▶ 🔀 `🚧 WIP` `Stale` **feat: Add per event timing** (#3124)
  by @CouthuresJeremy, ⚠ **no reviewer**, updated on 2024-07-11

- ▶ 🔀 `Stale` **feat: Geometry agnostic space point maker** (#2890)
  by @Alonl14, ⚠ **no reviewer**, updated on 2024-07-06

- ▶ ⊙ `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

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

- ▶ ⊙ Stale **Add Primary Vertex Label to tracks** (#1544)
  by @Lucas-Borgna, updated on 2024-06-25

- ▶ ⊙ 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

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

- ▶ ⊙ `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

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

- ⊙ `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

- ⑂ `🚧 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

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

- ▶ ⊙ 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

- ▶ ⊙ 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

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

- ▶ ⊙ 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

- ▶ ⊙ 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

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

- ▶ ⊙ 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

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

- ▶ ⊙ Stale **Expand TrackingGeometry building from DD4hep with user given input** (#2403)
  by @asalzburger, updated on 2023-09-27

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

- ▶ ⊙ Stale **FPE: GaussianMixtureReduction** (#2347)
  by @paulgessinger, updated on 2023-09-03

- ▶ ⊙ Stale **FPE: RootTrajectoryStatesWriter** (#2348)
  by @paulgessinger, updated on 2023-09-03

- ▶ ⊙ Stale **FPE: RootTrajectorySummaryWriter** (#2284)
  by @paulgessinger, updated on 2023-08-12

- ▶ ⊙ 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

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

- ▶ ⊙ 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 lxplus** (#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

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

- ▶ ⊙ Stale **Estimate Track Parameters from Seeds use only one surface. What about strips?** (#1895)
  by @CarloVarni, updated on 2023-05-09

- ▶ ⊙ Stale **Bug: Unpredicatable 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

- ▶ ⊙ 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

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

- ▶ ⊙ 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 @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

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

- ⊙ Stale **Bug: issue on first build after DD4hep update on system with globaly 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