


















## Pull request and issue summary for acts-project/acts














January 24, 2023

## acts-project/acts: PRs merged between 2023-01-17 and 2023-01-24 |














- ▶  **build: Add -Wfloat-conversion to clang warnings** (PR#1676)  
by @benjaminhuth, no assignee, merged on 2023-01-17
- ▶  **fix: fix enum to test presence of inner tube cover surface.** (PR#1771)  
by @goetzgaycken, no assignee, merged on 2023-01-17
- ▶  **fix: Missing Include in CuboidVolumeBuilder** (PR#1786)  
by @CarloVarni, no assignee, merged on 2023-01-17
- ▶  **ci: Fix plot ranges in physmon vertexing plots** (PR#1787)  
by @paulgessinger, no assignee, merged on 2023-01-17
- ▶  **refactor: Managing Seed Candidates with ad-hoc container** (PR#1764)  
by @CarloVarni, assigned to @noemina, merged on 2023-01-17
- ▶  **feat: GeID hook from python & ODD hook** (PR#1779)  
by @benjaminhuth, no assignee, merged on 2023-01-18
- ▶  **feat: Visualization for DetectorVolume and Portal** (PR#1762)  
by @Matthewharri, no assignee, merged on 2023-01-18
- ▶  **refactor!: Changes to SeedFinderOrthogonal to allow reuse of the object** (PR#1757)  
by @tboldagh, no assignee, merged on 2023-01-18

## acts-project/acts: PRs merged between 2023-01-17 and 2023-01-24 II

























- ▶  **refactor: modernize & add checks to 'Acts::TrackingGeometryBuilder'** (PR#1656)  
by @benjaminhuth, assigned to @andiwand, merged on 2023-01-18
- ▶  **feat: Optionally decorate geometry dumps to json.** (PR#1732)  
by @goetzgaycken, no assignee, merged on 2023-01-18
- ▶  **docs: polish tgeo plugin doc** (PR#1397)  
by @niermann999, assigned to @niermann999, merged on 2023-01-18
- ▶  **docs: Adding script and documentation for geometry and material handling** (PR#1784)  
by @noemina, assigned to @noemina, merged on 2023-01-18
- ▶  **fix: Don't write empty trajectories in RootTrajectorySummaryWriter** (PR#1789)  
by @benjaminhuth, no assignee, merged on 2023-01-18
- ▶  **feat: Enable Geant4 logging in VERBOSE mode** (PR#1790)  
by @benjaminhuth, no assignee, merged on 2023-01-20
- ▶  **fix: Let addGeant4 respect particle selection** (PR#1792)  
by @Corentin-Allaire, assigned to @andiwand, merged on 2023-01-23
- ▶  **refactor: physmon vertexing** (PR#1688)  
by @andiwand, no assignee, merged on 2023-01-24
- ▶  **fix: sequencer timing output** (PR#1793)  
by @andiwand, no assignee, merged on 2023-01-24



- ▶  **feat: Add option to use odd with G4** (PR#1794)  
by @Corentin-Allaire,  **no assignee**, updated on 2023-01-24
- ▶  **chore: bump actsvg to v0.4.28** (PR#1797)  
by @andiwand,  **no assignee**, updated on 2023-01-24
- ▶  **fix estimation of annulus bounds.** (PR#1796)  
by @goetzgaycken,  **no assignee**, updated on 2023-01-24
- ▶  **feat: Example of integrating HoughTransform example algorithm with python** (PR#1795)  
by @tboldagh,  **no assignee**, updated on 2023-01-24
- ▶  **refactor: Suppress large printout of Geant4 by default** (PR#1791)  
by @benjaminhuth,  **no assignee**, updated on 2023-01-23
- ▶  **fix: Energy loss function** (PR#1323)  
by @beomki-yeo, assigned to @asalzburger, updated on 2023-01-21
- ▶  **build: Install Examples headers** (PR#1752)  
by @osbornjd,  **no assignee**, updated on 2023-01-19

## acts-project/acts: Open PRs II














- ▶  **feat: Add INFO printouts about the layers & volumes** (PR#1773)  
by @tboldagh, assigned to @asalzburger, updated on 2023-01-19
- ▶  **fix: If ITk module splitting is enabled also split back side modules.** (PR#1716)  
by @goetzgaycken, assigned to @niermann999, updated on 2023-01-18
- ▶  **perf: Tile  $8 \times 8$  covariance matrix multiplication** (PR#1181)  
by @stephenswat,  **no assignee**, updated on 2023-01-17
- ▶  **feat: geometry id delegate** (PR#1684)  
by @asalzburger,  **no assignee**, updated on 2023-01-17
- ▶   **docs: adding Fatras description** (PR#1402)  
by @asalzburger, assigned to @asalzburger, updated on 2023-01-18
- ▶   **docs: first brush over the geometry pages** (PR#1395)  
by @asalzburger, assigned to @asalzburger, updated on 2023-01-18
- ▶   **feat: new Acts::Detector building from ProtoDetector description (cylindrical)**  
(PR#1767)  
by @asalzburger,  **no assignee**, updated on 2023-01-09

## acts-project/acts: Open PRs III

- ▶   **WIP**  **Stale** **feat: port RootNTupleReader (PR#1620)**  
by @andiwand,  **no assignee**, updated on 2022-12-21
- ▶   **WIP**  **Stale** **feat: Python documentation (PR#1633)**  
by @benjaminhuth,  **no assignee**, updated on 2022-12-21
- ▶   **WIP**  **Stale** **refactor: Create and use Acts::SpacePoint as input for public interface of Seedfinder! (PR#1394)**  
by @robertlangenberg,  **no assignee**, updated on 2022-11-12
- ▶   **WIP**  **Stale** **fix: B-field interpolation errors (PR#1467)**  
by @timadye,  **no assignee**, updated on 2022-10-12
- ▶   **WIP**  **Stale** **feat: Enable more fine-grained digitization configuration (PR#1272)**  
by @benjaminhuth,  **no assignee**, updated on 2022-10-03
- ▶   **WIP**  **Stale** **feat: Adding unit tests for perigee propagation outside beam pipe (PR#1354)**  
by @asalzburger,  **no assignee**, updated on 2022-09-09
















- ▶  **Stale** **Make central minimum track momentum threshold** (Issue#1761)  
by @paulgessinger,  **no assignee**, updated on 2023-01-21













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

- ▶  **Stale** **Make central minimum track momentum threshold** (Issue#1761)  
by @paulgessinger,  **no assignee**, updated on 2023-01-21
- ▶  **Stale** **Drop 'boost progress' from examples where it is not used** (Issue#1736)  
by @tboldagh,  **no assignee**, updated on 2023-01-16
- ▶  **Stale** **Remove 'volumeSignature' from geometry building** (Issue#1731)  
by @paulgessinger,  **no assignee**, updated on 2023-01-16
- ▶  **Stale** **Detailed timing per event** (Issue#1700)  
by @CouthuresJeremy,  **no assignee**, updated on 2023-01-05
- ▶  **Stale** **Optimal seeding parameters for a detector** (Issue#1699)  
by @CouthuresJeremy,  **no assignee**, updated on 2023-01-05
- ▶  **Stale** **Particle smearing assertion with Geant4** (Issue#1603)  
by @benjaminhuth, assigned to @benjaminhuth, updated on 2022-12-21
- ▶  **Stale** **Create volume restricted BFieldMap** (Issue#1659)  
by @asalzburger,  **no assignee**, updated on 2022-12-21






























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

- ▶  **WIP**  **Stale** **feat: port RootNTupleReader** (PR#1620)  
by @andiwand,  **no assignee**, updated on 2022-12-21
- ▶  **WIP**  **Stale** **feat: Python documentation** (PR#1633)  
by @benjaminhuth,  **no assignee**, updated on 2022-12-21
- ▶  **Stale** **Documentation update: Core** (Issue#1418)  
by @paulgessinger, assigned to @andiwand, updated on 2022-11-23
- ▶  **Stale** **Documentation update: Examples** (Issue#1420)  
by @paulgessinger, assigned to @andiwand, updated on 2022-11-23
- ▶  **Stale** **Documentation update: How-to (core)** (Issue#1422)  
by @paulgessinger,  **no assignee**, updated on 2022-11-23
- ▶  **Stale** **bug: interpolation out of bounds with ATLAS B-field map** (Issue#1484)  
by @timadye,  **no assignee**, updated on 2022-11-12
- ▶  **WIP**  **Stale** **refactor: Create and use Acts::SpacePoint as input for public interface of Seedfinder!** (PR#1394)  
by @robertlangenberg,  **no assignee**, updated on 2022-11-12












- ▶  **Stale** **Documentation update: Plugins** (Issue#1421)  
by @paulgessinger, assigned to @paulgessinger, updated on 2022-10-22
- ▶  **Stale** **Documentation update: FATRAS** (Issue#1419)  
by @paulgessinger, assigned to @asalzburger, updated on 2022-10-22
- ▶  **Stale** **Vertexing produces vertex candidates that are unreasonable** (Issue#1361)  
by @paulgessinger,  **no assignee**, updated on 2022-10-22
- ▶  **Stale** **Add Primary Vertex Label to tracks** (Issue#1544)  
by @Lucas-Borgna,  **no assignee**, updated on 2022-10-22
- ▶  **Stale** **EDM Memory usage** (Issue#1516)  
by @paulgessinger,  **no assignee**, updated on 2022-10-22
- ▶  **Stale** **Documentation update: Contribution guidelines** (Issue#1423)  
by @paulgessinger, assigned to @paulgessinger, updated on 2022-10-19
- ▶   **WIP** **Stale** **fix: B-field interpolation errors** (PR#1467)  
by @timadye,  **no assignee**, updated on 2022-10-12

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











- ▶   **WIP** Stale **feat: Enable more fine-grained digitization configuration** (PR#1272)  
by @benjaminhuth,  **no assignee**, updated on 2022-10-03
- ▶  Stale **Monitor Floating Point Exceptions in CI** (Issue#1481)  
by @paulgessinger,  **no assignee**, updated on 2022-10-01
- ▶  Stale **Optionally have the vertex finding recalculate perigee parameters relative to consistent reference** (Issue#1482)  
by @paulgessinger,  **no assignee**, updated on 2022-10-01
- ▶  Stale **Full chain vertexing with AMVF** (Issue#1406)  
by @paulgessinger,  **no assignee**, updated on 2022-10-01
- ▶  Stale **Documentation: hints for debugging** (Issue#1463)  
by @timadye,  **no assignee**, updated on 2022-09-24
- ▶  Stale **Vertexing produces unexpectedly poor efficiency** (Issue#1362)  
by @paulgessinger,  **no assignee**, updated on 2022-09-20
- ▶  Stale **Ambiguous perigees with low momentum** (Issue#1386)  
by @andiwand,  **no assignee**, updated on 2022-09-20

- ▶  **Stale** **Vertexing produces propagation errors** (Issue#1345)  
by @paulgessinger,  **no assignee**, updated on 2022-09-20
- ▶  **Stale** **add monitoring for vertexing in physmon** (Issue#1313)  
by @andiwand, assigned to @paulgessinger, updated on 2022-09-20
- ▶  **Stale** **2D r-z Magnetic Field Map Improperly Read** (Issue#669)  
by @osbornjd, assigned to @timadye, updated on 2022-09-20
- ▶  **Stale** **Fatras: Bethe-Heitler calculation wrong?** (Issue#1437)  
by @asalzburger,  **no assignee**, updated on 2022-09-20
- ▶   **WIP** **Stale** **feat: Adding unit tests for perigee propagation outside beam pipe** (PR#1354)  
by @asalzburger,  **no assignee**, updated on 2022-09-09
- ▶  **Stale** **Some writers performs their writes in the destructor** (Issue#881)  
by @paulgessinger, assigned to @Corentin-Allaire, updated on 2022-08-11
- ▶  **Stale** **Vertexing issues observed in python vertexing example** (Issue#1091)  
by @paulgessinger,  **no assignee**, updated on 2022-08-11

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

- ▶  **Stale** **Magnetic Field Storage** (Issue#1239)  
by @osbornjd,  **no assignee**, updated on 2022-06-12
- ▶  **Stale** **Reproducibility test using hash checks for non-linear KF** (Issue#1246)  
by @paulgessinger, assigned to @XiaocongAi, updated on 2022-06-12
- ▶  **Stale** **Cut tube segment dd4hep conversion tests** (Issue#1146)  
by @rahmans1, assigned to @asalzburger, updated on 2022-05-25
- ▶  **Stale** **Bug: fatras different particle final states between python and executable** (Issue#1221)  
by @CouthuresJeremy,  **no assignee**, updated on 2022-05-01
- ▶  **Stale** **ci: Coverage job is broken with gcovr >= 5.1** (Issue#1211)  
by @paulgessinger, assigned to @paulgessinger, updated on 2022-04-29
- ▶  **Stale** **Bug: issue on first build after DD4hep update on system with globally installed acts** (Issue#1139)  
by @gagnonlg,  **no assignee**, updated on 2022-02-22
- ▶  **Stale** **Feat: Radial bounds in DD4hep plugin** (Issue#822)  
by @whit2333,  **no assignee**, updated on 2022-02-19

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

- ▶  **Stale** **Add example (+test) for vertex fitting with constraints** (Issue#1100)  
by @paulgessinger,  **no assignee**, updated on 2022-01-07
- ▶  **Stale** **Should seed finding tools have a higher-level interface?** (Issue#988)  
by @stephenswat, assigned to @stephenswat, updated on 2021-11-25
- ▶  **Stale** **[bug] Off axis endcap with dd4hep plugin.** (Issue#942)  
by @whit2333, assigned to @asalzburger, updated on 2021-11-25
- ▶  **Stale** **Improvement: Estimate track parameters from seed at perigee surface** (Issue#1036)  
by @XiaocongAi,  **no assignee**, updated on 2021-11-10
- ▶  **Stale** **Polyhedron surfaces tests are disabled** (Issue#454)  
by @msmk0, assigned to @asalzburger, updated on 2021-11-04
- ▶  **Stale** **Tracking for TPC/DC without surfaces** (Issue#165)  
by @FabianKlimpel, assigned to @asalzburger, updated on 2021-11-04
- ▶  **Stale** **BoundingBox tests fail on double precision** (Issue#752)  
by @paulgessinger, assigned to @paulgessinger, updated on 2021-11-04
- ▶  **Stale** **Debug Information in Acts Seeder** (Issue#944)  
by @osbornjd, assigned to @robertlangenberg, updated on 2021-10-21

- ▶  **Stale** **fix: avoid double-static cast** (Issue#647)  
by @asalzburger, assigned to @asalzburger, updated on 2021-10-21