

















Pull request and issue summary for acts-project/acts

March 7, 2023



acts-project/acts: PRs merged between 2023-02-28 and 2023-03-07 |















- ▶  **chore: new ACTSVG version for MS chambers** (PR#1899)
by @asalzburger, assigned to @noemina, merged on 2023-02-28
- ▶  **perf: Use inline functions** (PR#1884)
by @CarloVarni, no assignee, merged on 2023-02-28
- ▶  **refactor: and fix truth seeding** (PR#1897)
by @andiwand, no assignee, merged on 2023-02-28
- ▶  **fix: Pass By Reference function and Extend object to binned group** (PR#1850)
by @CarloVarni, no assignee, merged on 2023-03-01
- ▶  **fix: remove deleted track selector params in python** (PR#1907)
by @andiwand, no assignee, merged on 2023-03-01
- ▶  **refactor: correcting a typo on surfacetypes and add type binding for surfaces** (PR#1903)
by @dimitra97, no assignee, merged on 2023-03-01
- ▶  **refactor: make RNG independent of algorithm order** (PR#1905)
by @andiwand, no assignee, merged on 2023-03-02
- ▶  **refactor: Reduce unconfigurable default loggers** (PR#1912)
by @paulgessinger, no assignee, merged on 2023-03-02

acts-project/acts: PRs merged between 2023-02-28 and 2023-03-07 II


















- ▶  **refactor: Seeding algo level bin finders** (PR#1913)
by @paulgessinger, no assignee, merged on 2023-03-02
- ▶  **refactor: Unify readers, writers and algorithms** (PR#1901)
by @paulgessinger, assigned to @benjaminhuth, merged on 2023-03-02
- ▶  **feat: GSF backward-pass misses as outliers** (PR#1904)
by @benjaminhuth, no assignee, merged on 2023-03-03
- ▶  **feat: Machine learning based Ambiguity Solver** (PR#1877)
by @Corentin-Allaire, no assignee, merged on 2023-03-03
- ▶  **refactor: disambiguate seeds and prototracks in examples** (PR#1906)
by @andiwand, no assignee, merged on 2023-03-03
- ▶  **feat: raise RuntimeError if invalid inputSpacePointsType in ITk configuration** (PR#1902)
by @LuisFelipeCoelho, no assignee, merged on 2023-03-05
- ▶  **docs: Machine Learning based Ambiguity Solver** (PR#1917)
by @Corentin-Allaire, no assignee, merged on 2023-03-06
- ▶  **fix: Add default arguments to estimateTrackParamsfFromSeed** (PR#1920)
by @paulgessinger, no assignee, merged on 2023-03-06

acts-project/acts: PRs merged between 2023-02-28 and 2023-03-07 III




















- ▶  **refactor: Remove missed components as early as possible & more** (PR#1921)
by @benjaminhuth, no assignee, merged on 2023-03-07
- ▶  **refactor: Remove unused attribute and method from InternalSpacePoint** (PR#1924)
by @CarloVarni, no assignee, merged on 2023-03-07

- ▶  **ci: Change particles in GSF script to electrons and enable interactions (PR#1916)**
by @benjaminhuth,  **no assignee**, updated on 2023-03-07
- ▶  **refactor: Examples sequence elements gain Read/WriteDataHandles (PR#1908)**
by @paulgessinger,  **no assignee**, updated on 2023-03-07
- ▶  **refactor!: MTJ get/set SourceLink by value (PR#1909)**
by @paulgessinger,  **no assignee**, updated on 2023-03-07
- ▶  **feat: Seeding constness improvements (PR#1923)**
by @CarloVarni,  **no assignee**, updated on 2023-03-07
- ▶  **feat: Move sort of vector outside of transformCoordinates (PR#1922)**
by @CarloVarni,  **no assignee**, updated on 2023-03-06
- ▶  **feat: Example of integrating HoughTransform example algorithm with python (PR#1795)**
by @tboldagh,  **no assignee**, updated on 2023-03-03
- ▶  **refactor: Improve logging in the Examples Detectors (PR#1911)**
by @paulgessinger,  **no assignee**, updated on 2023-03-02
















acts-project/acts: Open PRs II

- ▶  refactor: **Change transformCoordinates to avoid recalculation of variables in Seedfinder** (PR#1831)
by @LuisFelipeCoelho,  **no assignee**, updated on 2023-03-02
- ▶  perf: **Tile 8x8 covariance matrix multiplication** (PR#1181)
by @stephenswat,  **no assignee**, updated on 2023-02-15
- ▶  fix: **Energy loss function** (PR#1323)
by @beomki-yeo, assigned to @asalzburger, updated on 2023-01-21
- ▶   refactor: **Seeding does not use a grid of pointers** (PR#1820)
by @paulgessinger,  **no assignee**, updated on 2023-03-07
- ▶   refactor: **seeding always sorts SPs** (PR#1910)
by @LuisFelipeCoelho,  **no assignee**, updated on 2023-03-07
- ▶   refactor!: **Rewrite Binned SP Group** (PR#1919)
by @CarloVarni,  **no assignee**, updated on 2023-03-05
- ▶   feat: **Space point implementation** (PR#1900)
by @CarloVarni,  **no assignee**, updated on 2023-03-01













acts-project/acts: Open PRs III

- ▶   **refactor: Exa.Trkx configurable stages (PR#1898)**
by @benjaminhuth,  **no assignee**, updated on 2023-02-27
- ▶   **docs: adding Fatras description (PR#1402)**
by @asalzburger, assigned to @asalzburger, updated on 2023-02-18
- ▶   **docs: first brush over the geometry pages (PR#1395)**
by @asalzburger, assigned to @asalzburger, updated on 2023-02-18
- ▶   **feat!: new cubic volume building (PR#1821)**
by @asalzburger,  **no assignee**, updated on 2023-02-03
- ▶   **refactor: Create and use Acts::SpacePoint as input for public interface of Seedfinder! (PR#1394)**
by @robertlangenberg,  **no assignee**, updated on 2022-11-12
- ▶   **fix: B-field interpolation errors (PR#1467)**
by @timadye,  **no assignee**, updated on 2022-10-12
- ▶   **feat: Adding unit tests for perigee propagation outside beam pipe (PR#1354)**
by @asalzburger,  **no assignee**, updated on 2022-09-09














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

- ▶   **WIP**  **Stale** **docs: adding Fatras description** (PR#1402)
by @asalzburger, assigned to @asalzburger, updated on 2023-02-18
- ▶   **WIP**  **Stale** **docs: first brush over the geometry pages** (PR#1395)
by @asalzburger, assigned to @asalzburger, updated on 2023-02-18
- ▶  **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** **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














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













- ▶  **Stale** **Create volume restricted BFieldMap** (Issue#1659)
by @asalzburger,  **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

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












- ▶  **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
- ▶  **Stale** **Monitor Floating Point Exceptions in CI** (Issue#1481)
by @paulgessinger,  **no assignee**, updated on 2022-10-01

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









- ▶  **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 @asalzbunger,  **no assignee**, updated on 2022-09-20
- ▶   **WIP** **Stale** **feat: Adding unit tests for perigee propagation outside beam pipe** (PR#1354)
by @asalzbunger,  **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
- ▶  **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

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

- ▶  **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
- ▶  **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

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

- ▶  **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