

















Pull request and issue summary for acts-project/acts














February 7, 2023

acts-project/acts: PRs merged between 2023-01-31 and 2023-02-07 |

















- ▶  **feat: Geant4 line/straw tube conversion capability** (PR#1811)
by @asalzburger, assigned to @andiwand, merged on 2023-01-31
- ▶  **feat: G4 plugin material mixing** (PR#1805)
by @andiwand, no assignee, merged on 2023-01-31
- ▶  **feat: KalmanFitter marks missed surfaces as outliers** (PR#1809)
by @paulgessinger, assigned to @andiwand, merged on 2023-02-01
- ▶  **fix: bug in calculation of cut for seed finder orthogonal** (PR#1815)
by @LuisFelipeCoelho, no assignee, merged on 2023-02-01
- ▶  **fix: Dangling pointer VolumeMaterialInteractionTests** (PR#1808)
by @paulgessinger, assigned to @andiwand, merged on 2023-02-01
- ▶  **refactor: Remove LoggerWrapper in favor of Logger refs** (PR#1812)
by @paulgessinger, assigned to @andiwand, merged on 2023-02-01
- ▶  **refactor: Suppress large printout of Geant4** (PR#1791)
by @benjaminhuth, assigned to @andiwand, merged on 2023-02-01
- ▶  **fix: If ITk module splitting is enabled also split back side modules.** (PR#1716)
by @goetzgaycken, assigned to @niermann999, merged on 2023-02-02

acts-project/acts: PRs merged between 2023-01-31 and 2023-02-07 II



















- ▶  **refactor: Material mapping howto for python bindings** (PR#1801)
by @Corentin-Allaire, no assignee, merged on 2023-02-03
- ▶  **feat: Make hit indices usable in Geant4** (PR#1817)
by @benjaminhuth, no assignee, merged on 2023-02-03
- ▶  **chore: bump actsvg to v0.4.28** (PR#1797)
by @andiwand, no assignee, merged on 2023-02-03
- ▶  **refactor: GX2F uses TrackContainer + log message cleanup** (PR#1823)
by @paulgessinger, no assignee, merged on 2023-02-03
- ▶  **feat: collapse material tracks** (PR#1816)
by @andiwand, no assignee, merged on 2023-02-03
- ▶  **feat: write extent envelope to json** (PR#1824)
by @andiwand, assigned to @asalzburger, merged on 2023-02-04
- ▶  **fix: change templates order for labelClusters** (PR#1827)
by @CarloVarni, assigned to @paulgessinger, merged on 2023-02-06
- ▶  **fix: GSF SourceLink reference** (PR#1833)
by @Maury98, no assignee, merged on 2023-02-07





- ▶  **refactor: improve g4 sensitive surface mapper logging** (PR#1832)
by @andiwand,  **no assignee**, updated on 2023-02-07
- ▶  **fix: enable compilation with ONNX 1.13** (PR#1835)
by @gagnonlg,  **no assignee**, updated on 2023-02-07
- ▶  **feat: Set up ODD together with python if possible** (PR#1830)
by @benjaminhuth,  **no assignee**, updated on 2023-02-07
- ▶  **feat: add detector builder infrastructure** (PR#1814)
by @asalzburger,  **no assignee**, updated on 2023-02-06
- ▶  **perf: Tile 8x8 covariance matrix multiplication** (PR#1181)
by @stephenswat,  **no assignee**, updated on 2023-01-31
- ▶  **fix: TGeo estimation of annulus bounds.** (PR#1796)
by @goetzgaycken,  **no assignee**, updated on 2023-01-31
- ▶  **fix: Energy loss function** (PR#1323)
by @beomki-yeo, assigned to @asalzburger, updated on 2023-01-21







acts-project/acts: Open PRs II

- ▶  **build: Install Examples headers (PR#1752)**
by @osbornjd,  **no assignee**, updated on 2023-01-19
- ▶   **feat: configurable charge smearing in geometric digitization & exact digitization (PR#1834)**
by @benjaminhuth,  **no assignee**, updated on 2023-02-07
- ▶   **refactor: Change transformCoordinates to avoid recalculation of variables in the Seedfinder (PR#1831)**
by @LuisFelipeCoelho,  **no assignee**, updated on 2023-02-06
- ▶   **refactor: no optional covariance in GSF (PR#1826)**
by @benjaminhuth, assigned to @andiwand, updated on 2023-02-06
- ▶   **feat!: new cubic volume building (PR#1821)**
by @asalzburger,  **no assignee**, updated on 2023-02-03
- ▶   **refactor: Seeding does not use a grid of pointers (PR#1820)**
by @paulgessinger,  **no assignee**, updated on 2023-02-02













acts-project/acts: Open PRs III

- ▶   **WIP** feat: Example of integrating HoughTransform example algorithm with python (PR#1795)
by @tboldagh,  **no assignee**, updated on 2023-01-24
- ▶   **WIP** docs: adding Fatras description (PR#1402)
by @asalzburger, assigned to @asalzburger, updated on 2023-01-18
- ▶   **WIP** docs: first brush over the geometry pages (PR#1395)
by @asalzburger, assigned to @asalzburger, updated on 2023-01-18
- ▶   **WIP** feat: new Acts::Detector building from ProtoDetector description (cylindrical) (PR#1767)
by @asalzburger,  **no assignee**, updated on 2023-01-09
- ▶   **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













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

- ▶  **Wrong template order in Clusterization.ipp** (Issue#1825)
by @gagnonlg, assigned to @gagnonlg, updated on 2023-02-06
- ▶  **Track projection to spheres** (Issue#1822)
by @c-dilks,  **no assignee**, updated on 2023-02-03
- ▶  **Different results for full_chain_itk when running locally vs lxplus** (Issue#1819)
by @CarloVarni,  **no assignee**, updated on 2023-02-02
- ▶  **Cmake error if ACTS_BUILD_PLUGIN_ACTSVG=ON** (Issue#1818)
by @DraTeots, assigned to @asalzburger, updated on 2023-02-02















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** **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
- ▶  **Stale** **Documentation update: Core** (Issue#1418)
by @paulgessinger, assigned to @andiwand, updated on 2022-11-23













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













- ▶  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

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












- ▶  **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
- ▶  **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






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

- ▶  **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 @asalzbuerger,  **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
- ▶  **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

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

- ▶  **Stale** **ci: Coverage job is broken with gcovr \geq 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
- ▶  **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