Pull request and issue summary for
acts-project/acts

January 31, 2023

acts-project/acts: PRs merged between 2023-01-24 and 2023-01-31 I

- ► ⅄ **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, merged on 2023-01-24

- ► ⅄ **ci: Change how we run python based check jobs** (PR#1799)
  by @paulgessinger, assigned to @andiwand, merged on 2023-01-25

- ► ⅄ **feat: port RootNTupleReader** (PR#1620)
  by @andiwand, assigned to @benjaminhuth, merged on 2023-01-25

- ► ⅄ **fix: G4 material converter** (PR#1803)
  by @andiwand, no assignee, merged on 2023-01-27

- ► ⅄ **refactor: move material composition code to the left** (PR#1804)
  by @andiwand, no assignee, merged on 2023-01-27

- ► ⅄ **feat: Add INFO printouts about the layers & volumes** (PR#1773)
  by @tboldagh, assigned to @asalzburger, merged on 2023-01-30

acts-project/acts: PRs merged between 2023-01-24 and 2023-01-31 II

- ▶ ⌥ **ci: Fix llvm installation for clang-tidy job** (PR#1807)
  by @paulgessinger, assigned to @andiwand, merged on 2023-01-30

- ▶ ⌥ **docs: Remove eclipse link because it doesn't exist anymore** (PR#1813)
  by @paulgessinger, no assignee, merged on 2023-01-30

- ▶ ⌥ **build: Fix build with external nlohmann_json** (PR#1806)
  by @paulgessinger, assigned to @andiwand, merged on 2023-01-30

- ▶ ⌥ **feat: Geant4 line/straw tube conversion capability** (PR#1811)
  by @asalzburger, assigned to @andiwand, merged on 2023-01-31

acts-project/acts: Open PRs I

- ⑂ **fix: Dangling pointer VolumeMaterialInteractionTests** (PR#1808)
  by @paulgessinger, assigned to @andiwand, updated on 2023-01-31

- ⑂ **feat: add detector builder infrastructure** (PR#1814)
  by @asalzburger, ⚠ **no assignee**, updated on 2023-01-31

- ⑂ **feat: KalmanFitter marks missed surfaces as outliers** (PR#1809)
  by @paulgessinger, assigned to @andiwand, updated on 2023-01-31

- ⑂ **fix: bug in calculation of cut for seed finder orthogonal** (PR#1815)
  by @LuisFelipeCoelho, ⚠ **no assignee**, updated on 2023-01-31

- ⑂ **refactor: Remove LoggerWrapper in favor of Logger refs** (PR#1812)
  by @paulgessinger, assigned to @andiwand, updated on 2023-01-31

- ⑂ **feat: G4 plugin material mixing** (PR#1805)
  by @andiwand, ⚠ **no assignee**, updated on 2023-01-31

- ⑂ **refactor: Material mapping howto for python bindings** (PR#1801)
  by @Corentin-Allaire, ⚠ **no assignee**, updated on 2023-01-30

acts-project/acts: Open PRs II

- ⑂ **fix: TGeo estimation of annulus bounds.** (PR#1796)
  by @goetzgaycken, ⚠ **no assignee**, updated on 2023-01-27

- ⑂ **chore: bump actsvg to v0.4.28** (PR#1797)
  by @andiwand, ⚠ **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

- ⑂ **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 8×8 covariance matrix multiplication** (PR#1181)
  by @stephenswat, ⚠ **no assignee**, updated on 2023-01-17

acts-project/acts: Open PRs III

- ⅄ **feat: geometry id delegate** (PR#1684)
  by @asalzburger, ⚠ **no assignee**, updated on 2023-01-17

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

▶ ⊙ **Improve error messages informativeness in python bindings** (Issue#1802)
by @tboldagh, ⚠ **no assignee**, updated on 2023-01-26

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

- ▶ ⊙ 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 @asalzburger, ⚠ **no assignee**, updated on 2022-09-20

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

- ▶ 🔀 🚧 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 >= 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 globaly 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

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

- ⊙ `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