Pull request and issue summary for acts-project/acts

November 29, 2022
acts-project/acts: PRs merged between 2022-11-22 and 2022-11-29

- **feat: adding portal, detector volume & detector** (PR#1645)
  by @asalzburger, no assignee, merged on 2022-11-22

- **feat: skip unnecessary iterations in seed filter if SPs are sorted by curvature** (PR#1672)
  by @LuisFelipeCoelho, no assignee, merged on 2022-11-22

- **fix: Add check in TrackFitterPerformanceWriter** (PR#1686)
  by @benjaminhuth, no assignee, merged on 2022-11-22

- **fix: comment_template bugs for seeding monitoring** (PR#1683)
  by @LuisFelipeCoelho, no assignee, merged on 2022-11-23

- **refactor: Add precondition check for MTJ ‘applyBackward’ and ‘visitBackwards’** (PR#1685)
  by @benjaminhuth, no assignee, merged on 2022-11-23

- **fix: telescope detector python binding + add test** (PR#1689)
  by @benjaminhuth, assigned to @andiwand, merged on 2022-11-23

- **feat: Hough Transform first implementation** (PR#1305)
  by @jahreda, assigned to @asalzburger, merged on 2022-11-24

- **fix: Hough Transform first implementation clang-tidy** (PR#1691)
  by @andiwand, assigned to @asalzburger, merged on 2022-11-25
acts-project/acts: PRs merged between 2022-11-22 and 2022-11-29

- 🔄 **fix: remove truth_smeared seeding plots from comment_template.md** (PR#1694) by @LuisFelipeCoelho, no assignee, merged on 2022-11-25

- 🔄 **fix: root hash only for last cycle** (PR#1692) by @andiwand, assigned to @paulgessinger, merged on 2022-11-28

- 🔄 **feat: Improve const correctness of MultiTrajectory** (PR#1698) by @paulgessinger, no assignee, merged on 2022-11-29
acts-project/acts: Open PRs

- 📘 docs: Added description of how to add new algorithm (PR#1599)
  by @tboldagh, assigned to @asalzburger, updated on 2022-11-29

- 📘 feat: CSV track param reader (PR#1678)
  by @andiwand, assigned to @asalzburger, updated on 2022-11-29

- 📘 feat: MultiTrajectory track state ranges (PR#1701)
  by @paulgessinger, no assignee, updated on 2022-11-29

- 📘 refactor: Remove dependency on Boost.program_options from detectors (PR#1697)
  by @benjaminhuth, no assignee, updated on 2022-11-29

- 📘 refactor!: Switch SourceLink to container (PR#1616)
  by @paulgessinger, no assignee, updated on 2022-11-29

- 📘 fix: Skip seeds with negative cotThetaAvg2 (PR#1655)
  by @paulgessinger, no assignee, updated on 2022-11-29

- 📘 chore: run physmon in parallel (PR#1681)
  by @andiwand, no assignee, updated on 2022-11-28
acts-project/acts: Open PRs II

- **feat**: Add Geometry ID hook for the endcap strip of the ODD (PR#1696)
  by @Corentin-Allaire, assigned to @benjaminhuth, updated on 2022-11-28

- **feat**: geometry id delegate (Experimental) (PR#1684)
  by @asalzburger, no assignee, updated on 2022-11-28

- **refactor!**: Refactored SeedFinder to avoid the need to recreate it for every event (PR#1693)
  by @tboldagh, no assignee, updated on 2022-11-25

- **fix**: Missing track selection on negative d0 (PR#1687)
  by @paulgessinger, no assignee, updated on 2022-11-23

- **feat**: HelicalLinearizer accepts logger (PR#1682)
  by @paulgessinger, no assignee, updated on 2022-11-22

- **perf**: Tile 8×8 covariance matrix multiplication (PR#1181)
  by @stephenswat, no assignee, updated on 2022-11-21

- **WIP** feat: Any type with configurable small buffer optimization (PR#1695)
  by @paulgessinger, no assignee, updated on 2022-11-25
acts-project/acts: Open PRs III

- WIP fix: physmon vertexing (PR#1688)
  by @andiwand, no assignee, updated on 2022-11-23

- WIP build: Add -Wconversion to compiler warnings (PR#1676)
  by @benjaminhuth, no assignee, updated on 2022-11-22

- WIP fix: remove double to bool conversion in vertexing (PR#1673)
  by @andiwan, no assignee, updated on 2022-11-18

- WIP feat: Floating point exception monitoring (PR#1649)
  by @paulgessinger, no assignee, updated on 2022-11-16

- WIP Stale docs: adding Fatras description (PR#1402)
  by @asalzburger, assigned to @asalzburger, 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

- WIP refactor: modernize & add checks to ‘Acts::TrackingGeometryBuilder’ (PR#1656)
  by @benjaminhuth, no assignee, updated on 2022-11-07
acts-project/acts: Open PRs  IV

- **WIP** ci: test exatrkx training ci (PR#1505)
  by @benjaminhuth, ! no assignee, updated on 2022-11-03

- **WIP** feat: Make Clusterization.hpp aware of grid dimensionality (PR#1634)
  by @gagnonlg, ! no assignee, updated on 2022-11-02

- **WIP** chore: Clang-tidy check headers (PR#1440)
  by @paulgessinger, ! no assignee, updated on 2022-10-31

- **WIP** feat: Python documentation (PR#1633)
  by @benjaiminhuth, ! no assignee, updated on 2022-10-28

- **WIP** feat: port RootNTupleReader (PR#1620)
  by @andiwand, ! no assignee, updated on 2022-10-27

- **WIP** Stale docs: first brush over the geometry pages (PR#1395)
  by @asalzburger, assigned to @asalzburger, updated on 2022-10-16

- **WIP** Stale docs: polish tgeo plugin doc (PR#1397)
  by @niermann999, assigned to @niermann999, updated on 2022-10-16
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 fix: Energy loss function (PR#1323)
by @beomki-yeo, 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

WIP Stale feat!: Allow regional seeding configuration (PR#1187)
by @Corentin-Allaire, no assignee, updated on 2022-07-30
acts-project/acts: Issues opened since 2022-11-22

- ✔️ Optimal seeding parameters for a detector (Issue#1699)
  by @CouthuresJeremy, no assignee, updated on 2022-11-29

- ✔️ Detailed timing per event (Issue#1700)
  by @CouthuresJeremy, no assignee, updated on 2022-11-29

- ✔️ Refactor Seeding to avoid repeated Finders instantiations (Issue#1690)
  by @tboldagh, no assignee, updated on 2022-11-23
acts-project/acts: New stale Issues / PRs since 2022-11-22

- **Stale** Documentation update: How-to (core) (Issue#1422)
  by @paulgessinger, **no assignee**, updated on 2022-11-23

- **Stale** Documentation update: Examples (Issue#1420)
  by @paulgessinger, assigned to @andiwand, updated on 2022-11-23

- **Stale** Documentation update: Core (Issue#1418)
  by @paulgessinger, assigned to @andiwand, updated on 2022-11-23
acts-project/acts: All stale Issues / PRs I

- **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

- **WIP** **Stale** docs: adding Fatras description (PR#1402)
  by @asalzburger, assigned to @asalzburger, updated on 2022-11-12

- **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 II

- ✗ 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  **docs: first brush over the geometry pages** (PR#1395)
  by @asalzburger, assigned to @asalzburger, updated on 2022-10-16

- 🧪 WIP  Stale  **docs: polish tgeo plugin doc** (PR#1397)
  by @niermann999, assigned to @niermann999, updated on 2022-10-16
acts-project/acts: All stale Issues / PRs III

- **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

- **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**  
  **KalmanFilter error: No measurement detected during the propagation** (Issue#1328)  
  by @CarloVarni, **no assignee**, updated on 2022-09-21
acts-project/acts: All stale Issues / PRs IV

- **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 @timadys, updated on 2022-09-20

- **Stale** Fatras: Bethe-Heitler calculation wrong? (Issue#1437)
  by @asalzburger, no assignee, updated on 2022-09-20

- **WIP** Stale fix: Energy loss function (PR#1323)
  by @beomki-yeo, 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
- 🔄 WIP Stale **feat!: Allow regional seeding configuration** (PR#1187) by @Corentin-Allaire, no assignee, updated on 2022-07-30
- ⏰ 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
acts-project/acts: All stale Issues / PRs VI

- 🔄 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

- 🔄 Stale [bug] Off axis endcap with dd4hep plugin. (Issue#942) by @whit2333, assigned to @asalzburger, updated on 2021-11-25
- Improvement: Estimate track parameters from seed at perigee surface (Issue#1036)
  by @XiaocongAi, no assignee, updated on 2021-11-10
- Polyhedron surfaces tests are disabled (Issue#454)
  by @msmk0, assigned to @asalzburger, updated on 2021-11-04
- Tracking for TPC/DC without surfaces (Issue#165)
  by @FabianKlimpel, assigned to @asalzburger, updated on 2021-11-04
- BoundingBox tests fail on double precision (Issue#752)
  by @paulgessinger, assigned to @paulgessinger, updated on 2021-11-04
- Debug Information in Acts Seeder (Issue#944)
  by @osbornjd, assigned to @robertlangenberg, updated on 2021-10-21
- fix: avoid double-static cast (Issue#647)
  by @asalzburger, assigned to @asalzburger, updated on 2021-10-21