

Highlights from the ACTS project

- ACTS is an open-source and framework-independent track reconstruction tool set based on the ATLAS offline tracking software which delivered outstanding performance
- ⇒ benefits from more than seven years of experience
- design is focused on excellent computing performance with the provided event data model while maintaining the possibility to adapt to your own code
- it provides:
 - surface-based description of tracking geometry with embedded navigation
 - converters for many common geometry description languages (e.g. DD4Hep, gdml, TGeo)
 - simple classes for track parameters and measurements
 - adaptive Runge-Kutta track propagator with Nyström method for transport of covariance matrix
 - Kalman filter for track fitting
 - simple seed finding algorithm

