

Software Tutorial

Highlights

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Overall

- ▶ Very good program that definitely helps bring everything together
- ▶ The software tutorial is a great resource and most of it is online
 - ▶ <https://twiki.cern.ch/twiki/bin/view/AtlasComputing/SoftwareTutorialSoftwareBasics>: Initial account setup
 - ▶ <https://atlassoftwaredocs.web.cern.ch/ABtutorial/>: This is the main analysis tutorial that helps you setup an analysis in either Event Loop or Athena
 - ▶ <https://twiki.cern.ch/twiki/bin/view/AtlasComputing/SoftwareTutorialFindingDatasets>: For finding datasets, Run Query, COMA, AMI
 - ▶ <https://twiki.cern.ch/twiki/bin/view/AtlasComputing/SoftwareTutorialGettingDatasets>: For rucio
 - ▶ https://twiki.cern.ch/twiki/bin/view/AtlasComputing/SoftwareTutorialUsingTheGrid#Submitting_jobs_to_the_GRID_user: For the grid
 - ▶ <https://atlassoftwaredocs.web.cern.ch/gittutorial/GitCheatSheet.pdf>: Cheat sheet for Git Commands.

Root Updates

- ▶ <https://indico.cern.ch/event/811664/contributions/3382397/attachments/1856966/3050446/AtlasIntroductoryCourse.pdf>
- ▶ New features added to ROOT in version 6.16/00
 - ▶ Automatic coloring of primitives, and auto legend placement
 - ▶ Parallelism in ROOT, root -t
 - ▶ Declarative Analyses with RDataFrame
 - ▶ A new way to draw from TTree that is much faster
 - ▶ <https://indico.cern.ch/event/811664/contributions/3382398/attachments/1854234/3045047/go>: This is a fun tutorial using interactive root that shows the new functionality using open CMS data

Other Fun Things

- ▶ <https://twiki.cern.ch/twiki/bin/view/AtlasComputing/SoftwareTutorialMonteCarlo>: For creating MC
- ▶ <https://indico.cern.ch/event/811664/contributions/3382412/attachments/1858248/3053010/sw-07-06-19.pdf>: For creating ATLANTIS event displays