

ATLAS ITk Production Database usage

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The ATLAS experiment will undergo major upgrades for the high luminosity LHC. The high pile-up interaction environment (up to 200 interactions per 40MHz bunch crossing) requires a new radiation-hard, fast readout tracking detector.

The Inner Tracker (ITk) upgrade design includes ~28,000 modules. It is vital to follow the complex global production flow. The ITk production database (PDB) allows monitoring of production quality and speed. After production the information will be kept for 10 years of data-taking.

Database tools for interaction and reporting are developed for collaboration users with various skill-sets. Tools include a pythonic API wrapper, upload GUIs, commandline scripts, containerised applications, and CERN hosted resources.

This presentation promotes information exchange and collaboration tools which supports detector construction in large-scale experiments. Through examples, the general themes of data management and multi-user global accessibility will be discussed.

Alternate track

I read the instructions above

Yes

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