



# Analysis Tools in Geant4 10.2

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- In this presentation, we give a brief overview of the Geant4 analysis category, report on new developments since our CHEP 2013 contribution and on upcoming new features.
- The analysis category provides users with a “light” analysis tool available directly with an installation of Geant4. Its core is g4tools which provides histograms, profiles, ntuples, plots and code to write/read using various formats: CSV, ROOT, AIDA. XML, HBOOK, Postscript (for plots).

- New Features since our contributions at CHEP 2013:
  - 3D histograms and 1D, 2D profiles, support for histograms with CSV output
  - Analysis Reader
  - Added "batch plotting" facility
  - Added classes for management of user parameters
  - The ability to send/receive histograms & profiles through MPI is available since 10.2
- Upcoming New Features for 10.3
  - Parallel ntuple writing in MT/MPI in ROOT format
    - Enabling merging of ntuple into a single (or a desired number) of output files
  - Further improvements to parameters framework
  - Drop support for HBOOK output

