0_Toc

1. Motivation and Introduction
2. ROOT Basics
   - 2.1 ROOT as calculator
   - 2.2 Learn C++ at the ROOT prompt
   - 2.3 ROOT as function plotter
   - 2.4 Controlling ROOT
   - 2.5 Plotting Measurements
   - 2.6 Histograms in ROOT
   - 2.7 Interactive ROOT
   - 2.8 ROOT Beginners' FAQ
     - 2.8.1 ROOT type declarations for basic data types
     - 2.8.2 Configure ROOT at start-up
     - 2.8.2 ROOT command history
     - 2.8.3 ROOT Global Pointers
3. Root Macros
   - 3.1 General Remarks on ROOT macros
   - – 3.2 A more complete example
   - 3.3 Summary of Visual effects
     - – ∗ · 3.3.1 Colours and Graph Markers
     - – ∗ 3.3.2 Arrows and Lines
     - – 3.3.3 Text
   - 3.4 Interpretation and Compilation
     - – ∗ · 3.4.1 Compile a Macro with ACLiC
     - – ∗ 3.4.2 Compile a Macro with the Compiler

4. Graphs
    - 4.1 Read Graph Points from File
    - 4.2 Polar Graphs
    - 4.3 2D Graphs
    - 4.4 Multiple graphs
5. Histograms
    - 5.1 Your First Histogram
    - 5.2 Add and Divide Histograms
    - 5.3 Two-dimensional Histograms
    - 5.4 Multiple histograms
6. Functions and Parameter Estimation
    - 6.1 Fitting Functions to Pseudo Data
    - 6.2 Toy Monte Carlo Experiments
7. File IO and Parallel Analysis
    - 7.1 Storing ROOT Objects
    - 7.2 N-tuples in ROOT
        - 7.2.1 Storing simple N-tuples
        - 7.2.2 Reading N-tuples
        - 7.2.3 Storing Arbitrary N-tuples
        - 7.2.4 Processing N-tuples Spanning over Several Files
        - 7.2.5 For the advanced user: Processing trees with a selector script
        - 7.2.6 For power-users: Multi-core processing with PROOF lite
        - 7.2.7 Optimisation Regarding N-tuples
8. ROOT in Python
    - 8.1 PyROOT
        - 8.1.1 More Python- less C++
            * 8.1.1.1 Customised Binning
    - 8.2 Custom code: from C++ to Python
9. Concluding Remarks
    - 9.1 References