

Introduction, Histograms, Scripts

You are welcome/encouraged to ask questions, this works best if I know what don't understand/know. Follow along, speak up, ask questions.

IntroSlides.pdf SLIDES UP TO DEMO 0

The root terminal is a powerful interpreter which can run on the fly c++, load libraries etc

INSTRUCTOR DEMO:

- *Demonstrate standard variable creation int/double*
- *Demonstrate for loop typed out on command line*
- *Show in a text editor TestCode.cpp*
- *Show .L TestCode.cpp and functions are now executable*

Introduce TH1 class Types D F etc

SLIDES UP TO DEMO 1

TOGETHER DEMO:

- *Create a local TH1D (make "name" different)*
- *Demonstrate tab auto-complete*
- *Discuss discuss function naming and title case convention*
- *Fill() (a few times)*
- *Draw() (automatically creates an instance of a class TCanvas)*
- *FillRanom("gaus",1000)*
- *SetLineColor()*
- *SetLineWidth()*
- *At this point anyone without a histogram can run "root TestScript.C"*
- *Now introduce the TCanvas view→Editor show selection of elements, demonstrate zooming and unzooming*

CONCLUSION SLIDE

**STUDENTS EXPLORE, PRIZE FOR THE PRETTIEST CANVAS
GENERAL Q&A**

Show .C saving

Fitting

INSTRUCTOR DEMO:

- Using histogram from before "*root TestScript.C*"
- *Show how to open FitPanel*
- *Dont go over all parts:*
 - Place you input function, range slider, fit button, set parameter panel, done*
- *Show entering an arbitrary function and setting range*
 - fit [0]+x*[1] on one side of the histogram*
- *Show terminal, highlight "Converged" Parameters & Par errors*
- *Show predefined "gaus"*
- *Fix mean to be a bit wrong*

FIRST FEW FITTING SLIDES

STUDENTS:

Have a go at fitting the basic TestScript.C histogram then move on to Exercise 1