MN-FIT at BES PC Farm

Liaoyuan Dong
IHEP, CAS, Beijing

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Content

Introduction

What MN-FIT Can do ?

1. **Mn-Fit is an interactive fitting and plotting package, that uses MINUIT to fit histograms or data.**
2. **Many functions are built into the package and it is easy for the user to add new ones.**
3. **Fitting of 1-D and 2-D histograms is possible, and you can also fit several histograms simultaneously and apply constraints on the function parameters.**
4. **Hardcopies of pictures can easily be made with a quality suitable for publication.**
5. **Mn-Fit can also be used purely as a plotting package without using the fitting.**

MN-FIT has been used in CLEO, L3, ALEPH, CDF and many other High Energy Physics Experiments.

Mn-Fit V4.06/07 has been installed in BES PCFarm. In this talk, I will give

1. **a brief how to run it and where to find more information.**
2. **a list of the examples to demonstrate various features.**

2. How To Run Mn-Fit

At BES PC Farm,

All MN-FIT files are in the directory /cern/mn_fit

Running Mn_Fit:
you can just give the command:
/cern/mn_fit/bin/mn_fit

You must define the DISPLAY variable before you start Mn_Fit or in the command line.

3. Getting Started

The following lists some of the most commonly usedcommands. For more details look in the reference manual or use the online help.

- help Help for MN_Fit
- exec Execute a series of commands in a file.
- fetch filename hist_number
  Fetch some histograms from a file
- index List the histograms fetched.
- plot hist_number Plot a histogram.
- function list List predefined functions.
- function add Add a function for fitting.
- fit hist_number Fit histogram
- display Show the fit results.
- hardcopy Write the current picture to a file

4. Mn-Fit Examples

- **Simple Fetch and Plot**

```
fet hbook4_test.his 1
plot 1
set hard demo1.ps
hardcopy post
close
```

- **Simple Gaussian Fit**

```
fit/gaus/like 1
or:
fun del 0
fun add gaus sigma
fit 1
mini
disp
set hard demo2.ps
hardcopy post
close
```

- **Breit Wigner Fit**
- **User Defined Function Fit**
- **Bifurcated Gaussian Fit**

5. Conclusion

- **Mn_FIT has been installed in BES PC Farm successfully.**