Notes on the FSRoot Package

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Abstract

FSRoot is a set of utilities to help manipulate information about different Final States (FS) produced in particle physics experiments. The utilities are built around the CERN ROOT framework. This document provides an introduction to FSRoot.

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1 Installation and Initial Setup

Instructions for installation and initial setup:

(1) Download the source:

```
git clone https://github.com/remitche66/FSRoot.git FSRoot
```

(2) Set the location of FSRoot in your login shell script (e.g. .cshrc):

```
setenv FSROOT [xxxxx]/FSRoot
```

(3) Also probably add the FSRoot directory to $DYLD_LIBRARY_PATH and $LD_LIBRARY_PATH. This allows you to compile code including FSRoot functions. For example:

```
setenv DYLD_LIBRARY_PATH $DYLD_LIBRARY_PATH\:$FSROOT
setenv   LD_LIBRARY_PATH   $LD_LIBRARY_PATH\:$FSROOT
```

(4) There is usually a .rootrc file in your home directory that ROOT uses for initialization. Add lines like these to .rootrc, which tell ROOT the location of FSRoot:

```
Unix.*.Root.DynamicPath: .:$(FSROOT):$(ROOTSYS)/lib:
Unix.*.Root.MacroPath:   .:$(FSROOT):
```

(5) Now when you open `ROOT`, the `FSRoot` utilities should be loaded and compiled – you should see a message saying "Loading the FSRoot Macros" along with the output of the compilation.