



Install ROOT...

- Download the appropriate ROOT version from <https://root.cern.ch/downloading-root>
 - ✓ “Appropriate” means corresponding to your operating system
 - Unix-like systems (Linux, MacOS): install ROOT v. 6
 - <https://root.cern.ch/content/release-61204>
 - Windows: precompiled binaries exist only for ROOT v.5
 - <https://root.cern.ch/content/release-53436>
 - ✓ Download the precompiled binaries, not the source!
 - ... unless you want to experience the compilation process – it’s fun but maybe you want to spend your time differently
- Some installation instructions are found here
 - ✓ <https://particle.phys.uvic.ca/~keeler/teaching/phys521a/Tools/rootInstall.html>
 - Instructions for the Window version propose to install Cygwin: try this path at your own risk (it used to work fine, but I did not personally tried since a long time, so no guarantee!)
- Otherwise, the only things you’ll need to do after installing is to properly setup the environment variables
 - ✓ <https://root.cern.ch/root/html/doc/guides/users-guide/GettingStarted.html#setting-the-environment-variables>

Or use it from your browser...

- <https://swanserver.web.cern.ch/swanserver/rootdemo/>

I have a CERN account	I don't have a CERN account
<h2 data-bbox="451 415 638 468">SWAN</h2>  <ul data-bbox="375 1011 824 1268" style="list-style-type: none">✓ Requires CERN credentials✓ CERNBox as home directory✓ Complete scientific software suite✓ Integrated with CERN services	<h2 data-bbox="1404 436 1591 489">Binder</h2>  <ul data-bbox="1342 982 1705 1103" style="list-style-type: none">✓ Anonymous✓ Temporary storage✓ A few software packages

Give ROOT a try...

- Browse the ROOT primer: <https://root.cern.ch/guides/primer>
- Have a look at the ROOT tutorial for Summer Student: <https://indico.cern.ch/event/395198/>
- Save the macro below as **TestFit.C** (use you preferred text editor), then execute it trying to understand what it does
 - ✓ To execute it, from the ROOT prompt type
`.x TestFit.C`
 - ✓ Try to modify the code!

```
void TestFit() {  
    // create an histogram  
    TH1F* h = new TH1F("h", "test histogram", 100, 0, 1);  
    // fill it with 500 random numbers a from uniform distribution  
    h->FillRandom("pol0", 500);  
    // draw the histogram;  
    h->Draw();  
    // Fit with second order polynomial  
    h->Fit("pol2");  
}
```