



Delphes tutorial requirements

- To follow the Delphes tutorial you will need
 - ROOT Data Analysis Framework
 - GCC C++ compiler
- If you have ROOT and GCC installed on your computer, please follow the instructions on the slide 2 on how to install and compile Delphes.
- Otherwise, please ask one of the Delphes tutorial organizers (Pavel Demin, Jerome de Favereau, Christophe Delaere) for an USB stick containing all the materials needed for the Delphes tutorial and follow the instructions on the slide 3 on how to install the virtual machine containing ROOT, GCC and Delphes.



Installing Delphes from source

- To successfully build Delphes the following prerequisite packages should be installed:
 - ROOT Data Analysis Framework
 - GCC C++ compiler

- Setup ROOT environment variables

- Get the code:

```
wget http://cp3.irmp.ucl.ac.be/downloads/Delphes-3.0.6.tar.gz
```

```
tar -zxf Delphes-3.0.6.tar.gz
```

- Compile:

```
cd Delphes-3.0.6
```

```
make
```

- Run:

```
./DelpheHepMC examples/delphes_card_CMS.tcl output.root input.hepmc
```



Installing a virtual machine for the Delphes tutorial

- Install VirtualBox (4.2+ is recommended):
 - for Windows and Mac OSX, installers are on the USB stick
 - for Linux, either use your package manager or download the most recent VirtualBox package from https://www.virtualbox.org/wiki/Linux_Downloads
- Copy virtual machine file “DelphesTutorial.vdi” from the USB stick to your hard drive
- Start VirtualBox
- Create a new virtual machine using the provided image:
 - Click the blue “New” icon
 - Pick a name for the machine and select Linux – Ubuntu
 - Set the memory to 1024 MB
 - Select “Use an existing hard drive” and chose “DelphesTutorial.vdi”
 - Select the newly created virtual machine and click the green “Start” icon