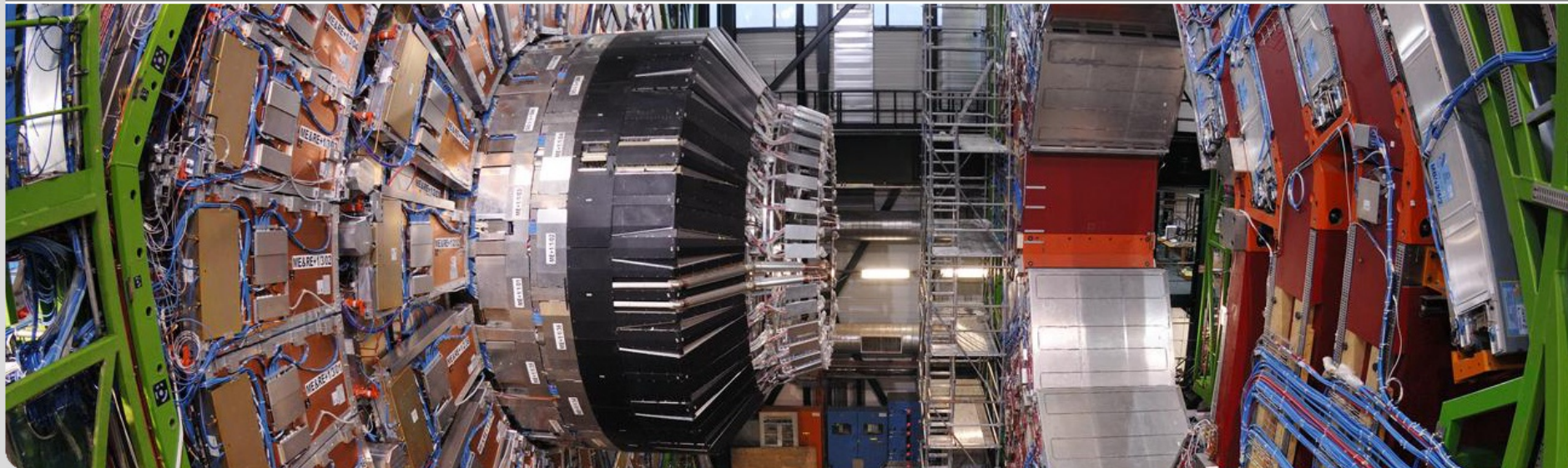


# C/C++ Development with Eclipse

Thomas Hauth



# Introduction

- <http://www.eclipse.org/>
- IDE for programming and debugging purposes
- Windows, MacOS, Linux
- No installation needed, can be run directly from the unpacked download
- More an empty shell than a full editor
- Functionality specific to programming languages is provided by plug-ins:
  - C/C++ plug-in, named CDT, used today
  - Java plugin, named JDT
  - Python plug-in, named PyDev
  - Latex plug-in, named TeXlipse
  - HTML, JavaScript, Web Development plug-ins, named WTP
- Advantage: One Environment for all your programming needs
- Disadvantage: Well, it is more like an OS ...



# Eclipse CDT

- CDT are the set of plug-ins for C/C++ development  
<http://www.eclipse.org/cdt/>
- Best is to download the Eclipse release with CDT pre-installed:  
<http://www.eclipse.org/downloads/>
  - Look for “Eclipse IDE for C/C++ Developers”
- Some of the features included in CDT:
  - Intelli sense
  - Syntax highlighting and checking
  - Visualization of inheritance trees
  - Interactive debugging with gdb
  - Refactoring tools
  - Many more features which I did not even discover yet ...

# Hands On

<https://github.com/ThomasHauth/SimpleCMake>

- This repository contains a small CMake example project which can be used to test basic code editing and compiling
- The README.me contains all instructions to import and setup this eclipse project
- The readme also contains instructions to setup Eclipse in conjunction with CMSSW projects
- All this examples run on lxplus with your custom download of Eclipse