

# ROOT training material

*an overview*

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Train the  
Trainers  
Event 2022

ROOT  
Data Analysis Framework  
<https://root.cern>



# The training github repository

[root-project/training](#)

- ▶ Collection of exercises, courses, slides
  - ROOT macros, Python scripts/notebooks
  
- ▶ Nice starting point, very wide range of materials



# Summer Students course

[root-project/training](https://root-project.org/training)

- ▶ Set of slides + exercises with Jupyter notebooks
- ▶ Very long overview of all ROOT components
- ▶ C++ and Python



## [root-project/software-carpentry](https://root-project.org/software-carpentry)

- ▶ Course ranging from ROOT basics to analysis with RDataFrame
- ▶ Roughly targeting 3 hours course
- ▶ Based fully on Jupyter notebooks



# Data analysis courses

- ▶ [CMS Data Analysis School](#)
- ▶ [ATLAS RDF analysis](#)



[website page](#), [doxygen page](#)

- ▶ Wide range of tutorials for the various components in ROOT
- ▶ RDF tutorials offer good example analyses
  - [H --> ZZ](#), [single top production](#)



- ▶ The renewed [user manual](#)
  - Detailed explanation of I/O, object ownership, shared libraries, PyROOT, RooFit
- ▶ The [documentation reference](#)
  - Search bar can be your friend
  - Docs are generated according to ROOT version
- ▶ The [forum](#)
  - An undeniably useful source of information (albeit loosely structured)
  - Specific cases/errors/questions that any student could face