



Experience on Installing Root

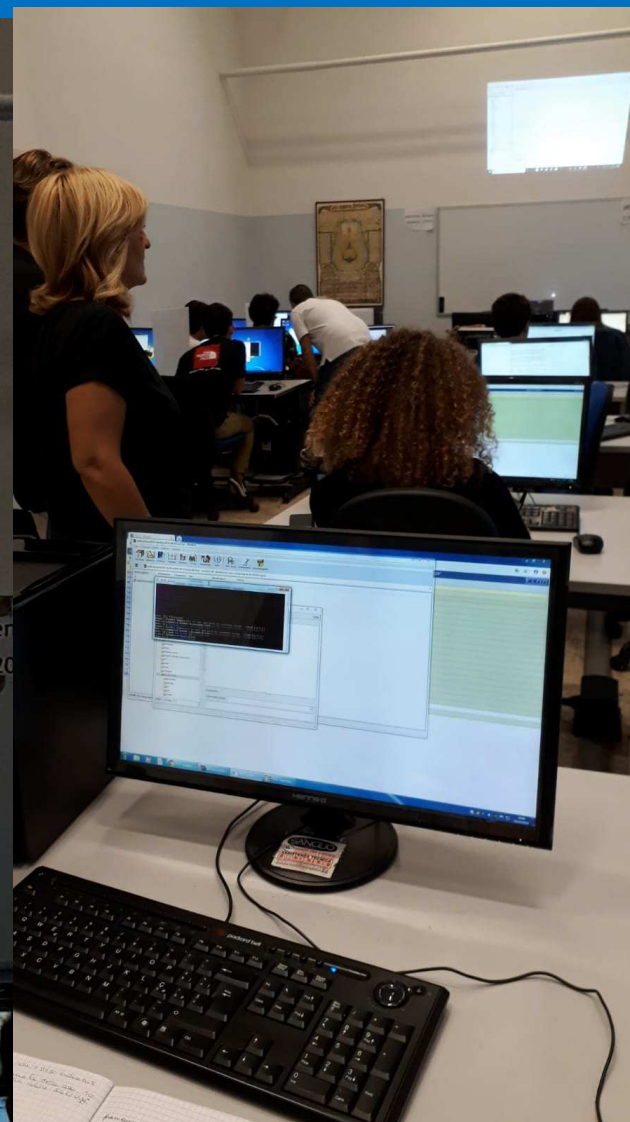
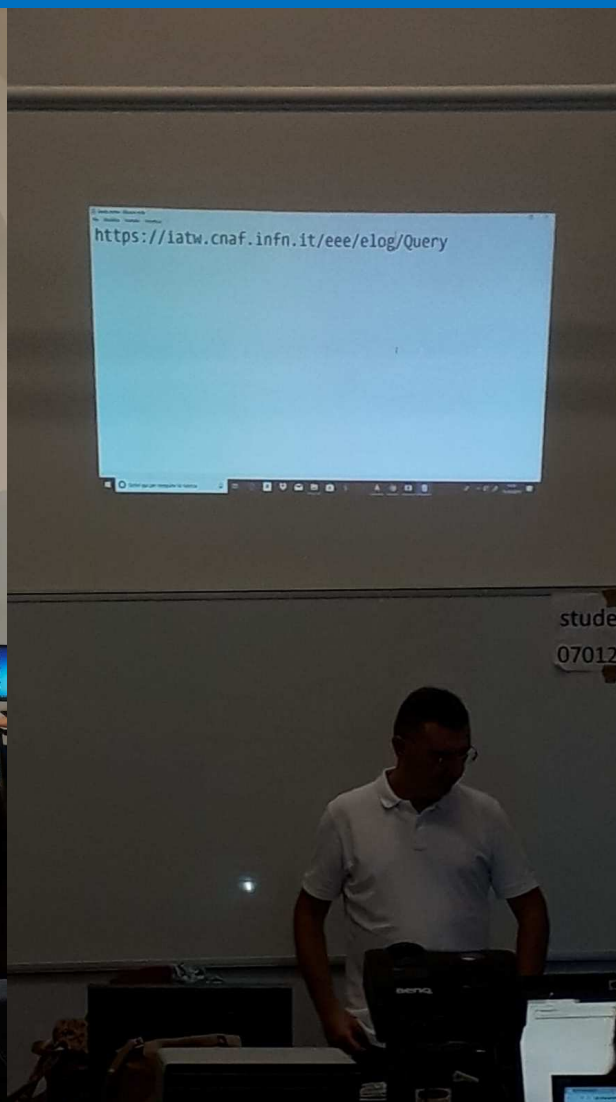
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- ✓ Before the lesson
- ✓ Installation on Windows
- ✓ Full compatibility with C/C++: an example
- ✓ Data Request
- ✓ Angular Graphs

Before the lesson

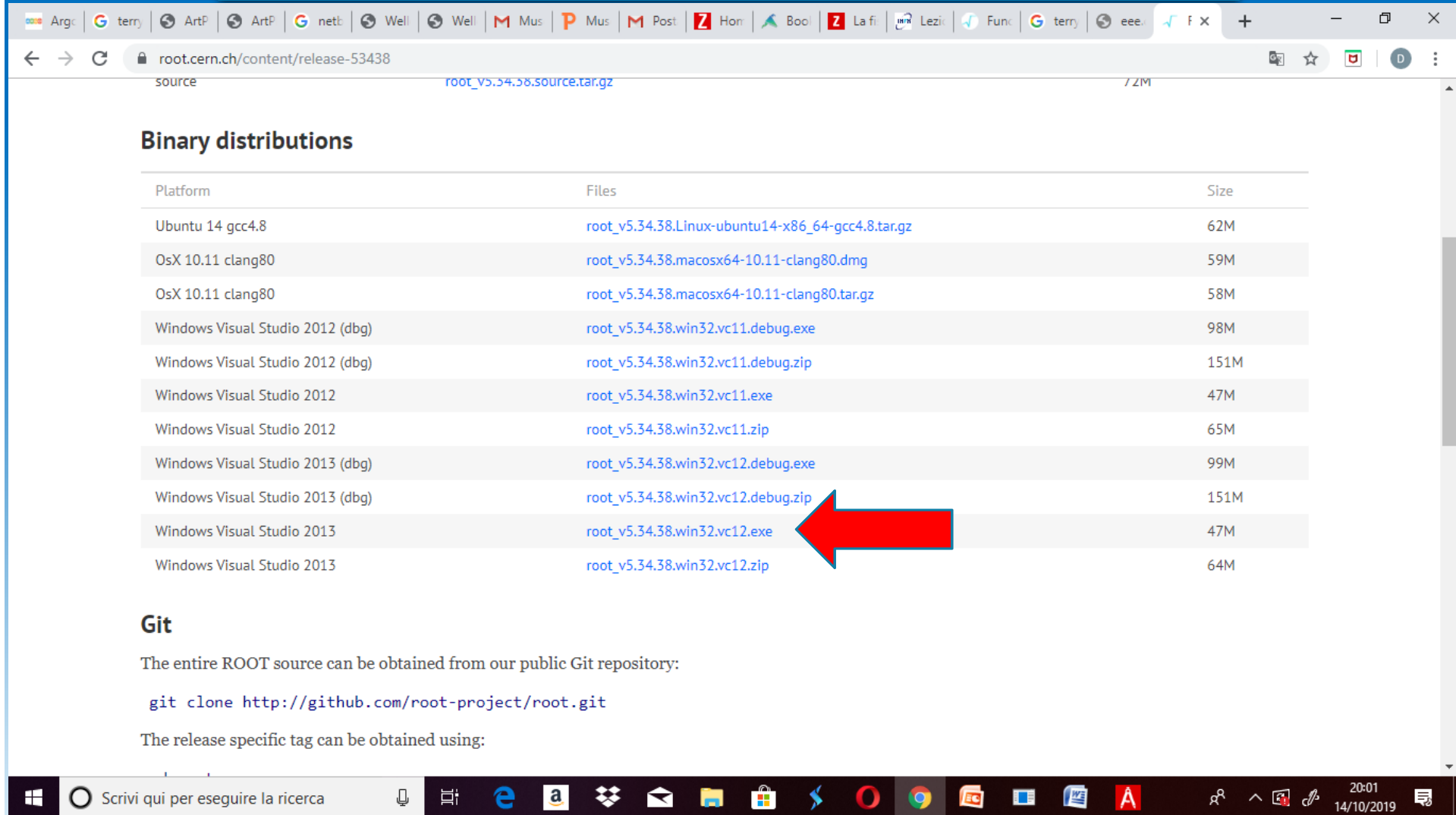
- ✓ First of all we shared our skills about Root among all the teachers in our EEE Group (problems with Antivirus, the right folder where to put root files etc.)
- ✓ We sent by email to our students the pdf file about the root installation guide so that they could read it on their smartphone during the lesson
- ✓ We installed Root on a PC in our lab

Installation on Windows: our lab



Installation on Windows: the download

(<https://root.cern.ch/content/release-53438>)



The screenshot shows a web browser displaying the ROOT project's release page. The URL in the address bar is root.cern.ch/content/release-53438. The page title is "source root_v5.34.38.source.tar.gz / ZIM".

Binary distributions

Platform	Files	Size
Ubuntu 14 gcc4.8	root_v5.34.38.Linux-ubuntu14-x86_64-gcc4.8.tar.gz	62M
OsX 10.11 clang80	root_v5.34.38.macosx64-10.11-clang80.dmg	59M
OsX 10.11 clang80	root_v5.34.38.macosx64-10.11-clang80.tar.gz	58M
Windows Visual Studio 2012 (dbg)	root_v5.34.38.win32.vc11.debug.exe	98M
Windows Visual Studio 2012 (dbg)	root_v5.34.38.win32.vc11.debug.zip	151M
Windows Visual Studio 2012	root_v5.34.38.win32.vc11.exe	47M
Windows Visual Studio 2012	root_v5.34.38.win32.vc11.zip	65M
Windows Visual Studio 2013 (dbg)	root_v5.34.38.win32.vc12.debug.exe	99M
Windows Visual Studio 2013 (dbg)	root_v5.34.38.win32.vc12.debug.zip	151M
Windows Visual Studio 2013	root_v5.34.38.win32.vc12.exe	47M
Windows Visual Studio 2013	root_v5.34.38.win32.vc12.zip	64M

A red arrow points to the [root_v5.34.38.win32.vc12.exe](#) file.

Git

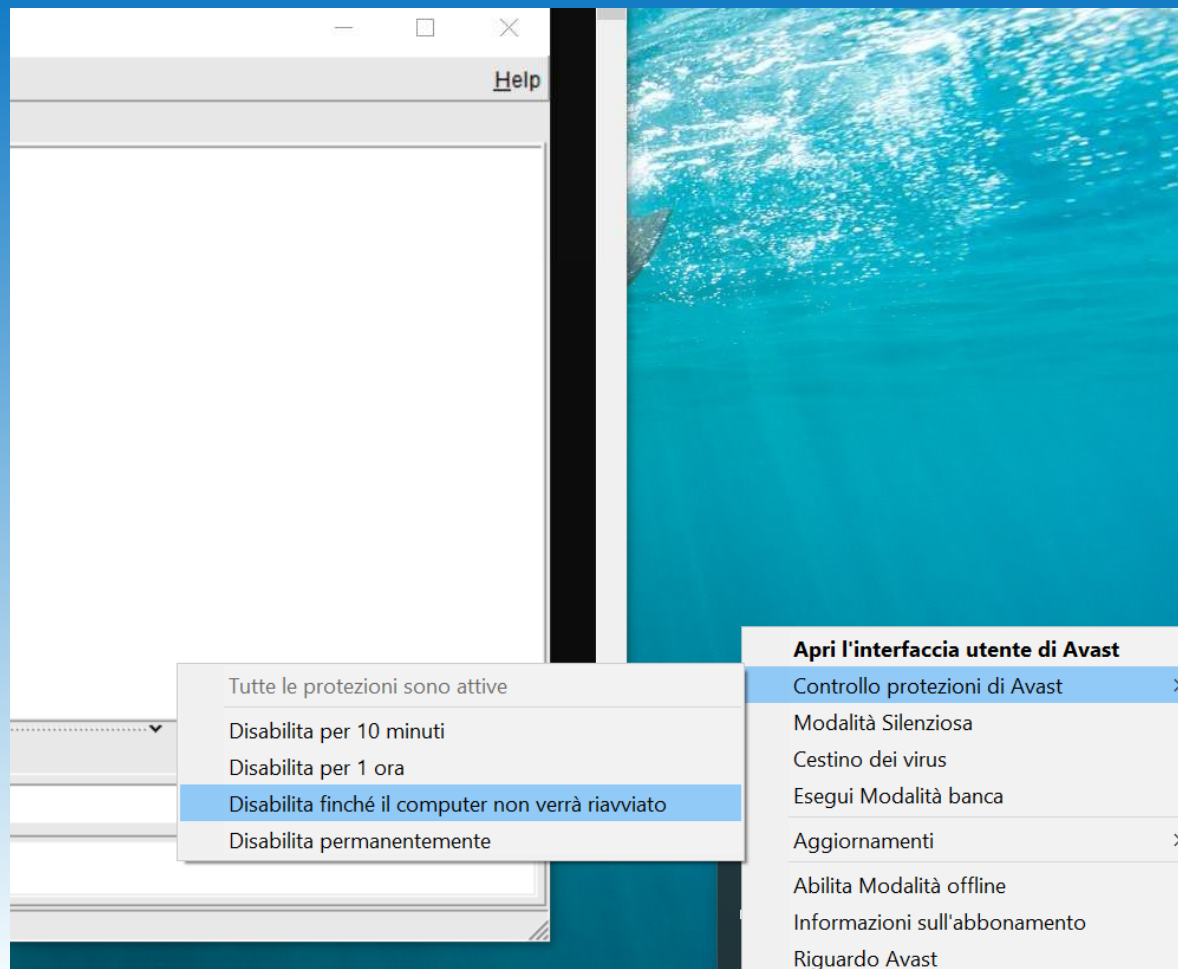
The entire ROOT source can be obtained from our public Git repository:

```
git clone http://github.com/root-project/root.git
```

The release specific tag can be obtained using:

The popular antivirus AVAST doesn't allow you to execute the ROOT shell, blocking it as a threat for the OS.

It's necessary to disable this antivirus if you want to work with Root .



Interactive mode:

```
ROOT session

*****
*
*      W E L C O M E  t o  R O O T      *
*
*   Version   5.34/36      5 April 2016  *
*
*   You are welcome to visit our Web site *
*      http://root.cern.ch               *
*
*****

ROOT 5.34/36 (v5-34-36@v5-34-36, Apr 05 2016, 10:25:45 on win32)

CINT/ROOT C/C++ Interpreter version 5.18.00, July 2, 2010
Type ? for help. Commands must be C++ statements.
Enclose multiple statements between { }.
root [0] double a =10;
root [1] double b =5;
root [2] cout << "somma=" << a+b << endl;
somma=15
root [3]
```


The students have written on notepad just an "Hello World" file to execute on Root.

hello.c - Blocco note

File Modifica Formato Visualizza ?

```
{
#include <iostream.h>

    cout << "Hello, World!"<<endl;
}
```

ROOT session

```
*****
*                                     *
*          W E L C O M E  t o  R O O T          *
*                                     *
*   Version   5.34/36           5 April 2016   *
*                                     *
*   You are welcome to visit our Web site   *
*          http://root.cern.ch               *
*                                     *
*****
```

ROOT 5.34/36 (v5-34-36@v5-34-36, Apr 05 2016, 10:25:45 on win3

CINT/ROOT C/C++ Interpreter version 5.18.00, July 2, 2010

Type ? for help. Commands must be C++ statements.

Enclose multiple statements between { }.

root [0] .x hello.c

Note: File "iostream.h" already loaded

Hello, World!

root [1]

Telescope BARI-01:

Request a subset of data

Submit Preview Back

Message ID: 8734 Entry time: Wed Oct 2 15:50:41 2019 In reply to: 8733

Entry time:	Tue Oct 15 14:17:46 2019	Author:	BARI-01
Author:	BARI-01	MC:	<input type="checkbox"/>
MC:	<input type="checkbox"/>	Output format:	ROOT
Output format:	ROOT	Telescope ID:	BARI-01
Telescope ID:	BARI-01	Start time:	01 April 2019
Start time:	April 1 Year: 2019	Stop time:	02 April 2019
Stop time:	April 2 Year: 2019	RunNumber:	<input checked="" type="checkbox"/>
RunNumber:	<input checked="" type="checkbox"/>	Seconds:	<input checked="" type="checkbox"/>
Seconds:	<input checked="" type="checkbox"/>	Nanoseconds:	<input checked="" type="checkbox"/>
Nanoseconds:	<input checked="" type="checkbox"/>	Theta:	<input checked="" type="checkbox"/>
Theta:	<input checked="" type="checkbox"/>	Phi:	<input checked="" type="checkbox"/>
Phi:	<input checked="" type="checkbox"/>	ChiSquare:	<input checked="" type="checkbox"/>
ChiSquare:	<input checked="" type="checkbox"/>	TimeOfFlight:	<input checked="" type="checkbox"/>
TimeOfFlight:	<input checked="" type="checkbox"/>	TrackLength:	<input checked="" type="checkbox"/>
TrackLength:	<input checked="" type="checkbox"/>	DeltaTime:	<input checked="" type="checkbox"/>
DeltaTime:	<input checked="" type="checkbox"/>	Pressure:	<input checked="" type="checkbox"/>
Pressure:	<input checked="" type="checkbox"/>	Cut:	ChiSquare < 10
Cut:	ChiSquare < 10	Data extraction succeeded	
		Attachment 1:	BARI-01from2019-04-01to2019-04-02.root.zip 28.017 MB

Data Request: 24 queries

Telescope ID: BARI-01

Full | Summary | Threaded | Hide attachments

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ID	Date	Author	MC	Output format	Telescope ID	Start time	Stop time	RunNumber	Seconds	Nanoseconds	Theta	Phi	ChiSquare	TimeOfFlight	TrackLen
9089	Tue Oct 15 15:57:38 2019	BARI-01	<input type="checkbox"/>	ROOT	BARI-01	01 April 2019	02 April 2019	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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9083	Tue Oct 15 15:57:37 2019	BARI-01	<input type="checkbox"/>	ROOT	BARI-01	01 April 2019	02 April 2019	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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9088	Tue Oct 15 15:57:37 2019	BARI-01	<input type="checkbox"/>	ROOT	BARI-01	01 April 2019	02 April 2019	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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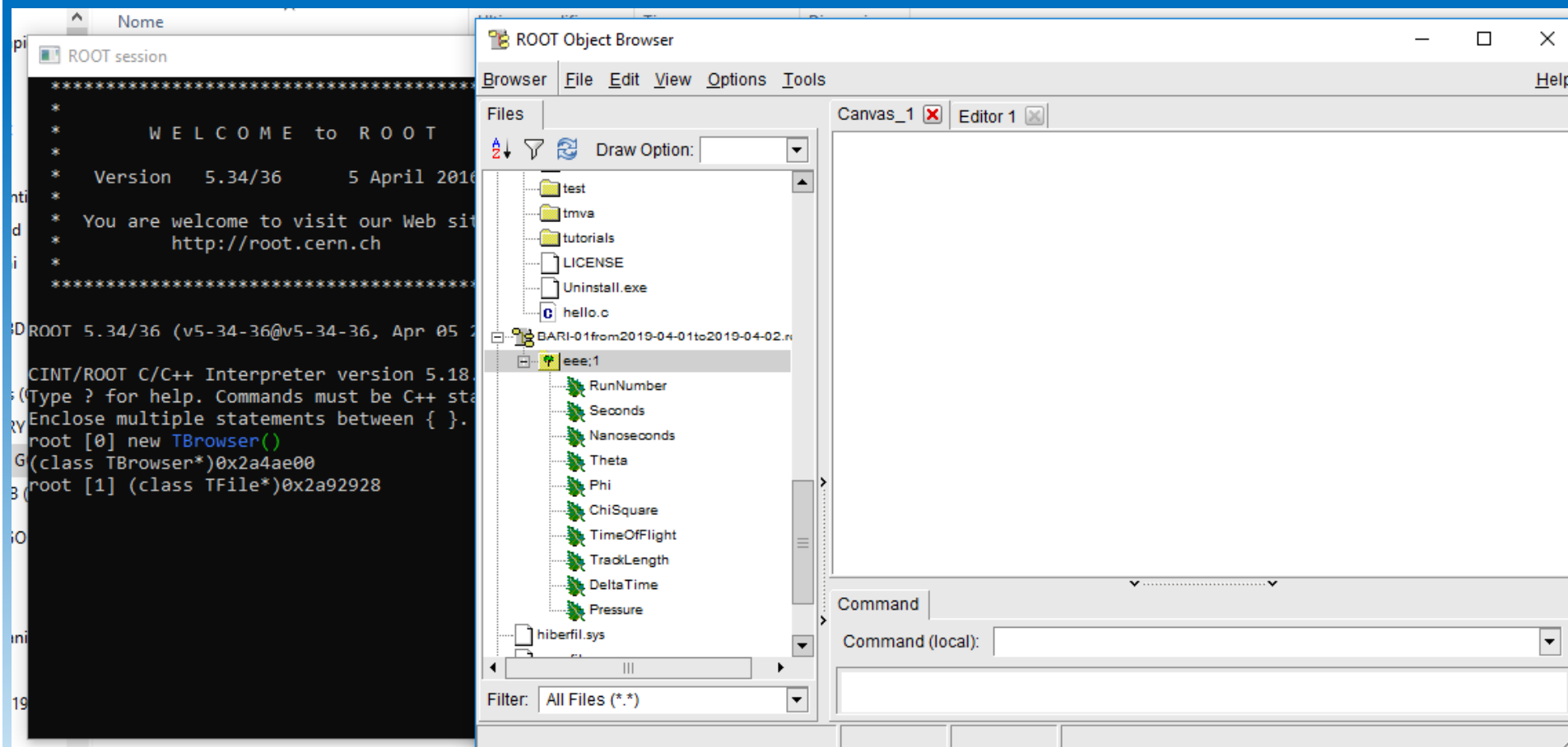
https://atw.chaf.infn.it/eee/elog/Query/9084

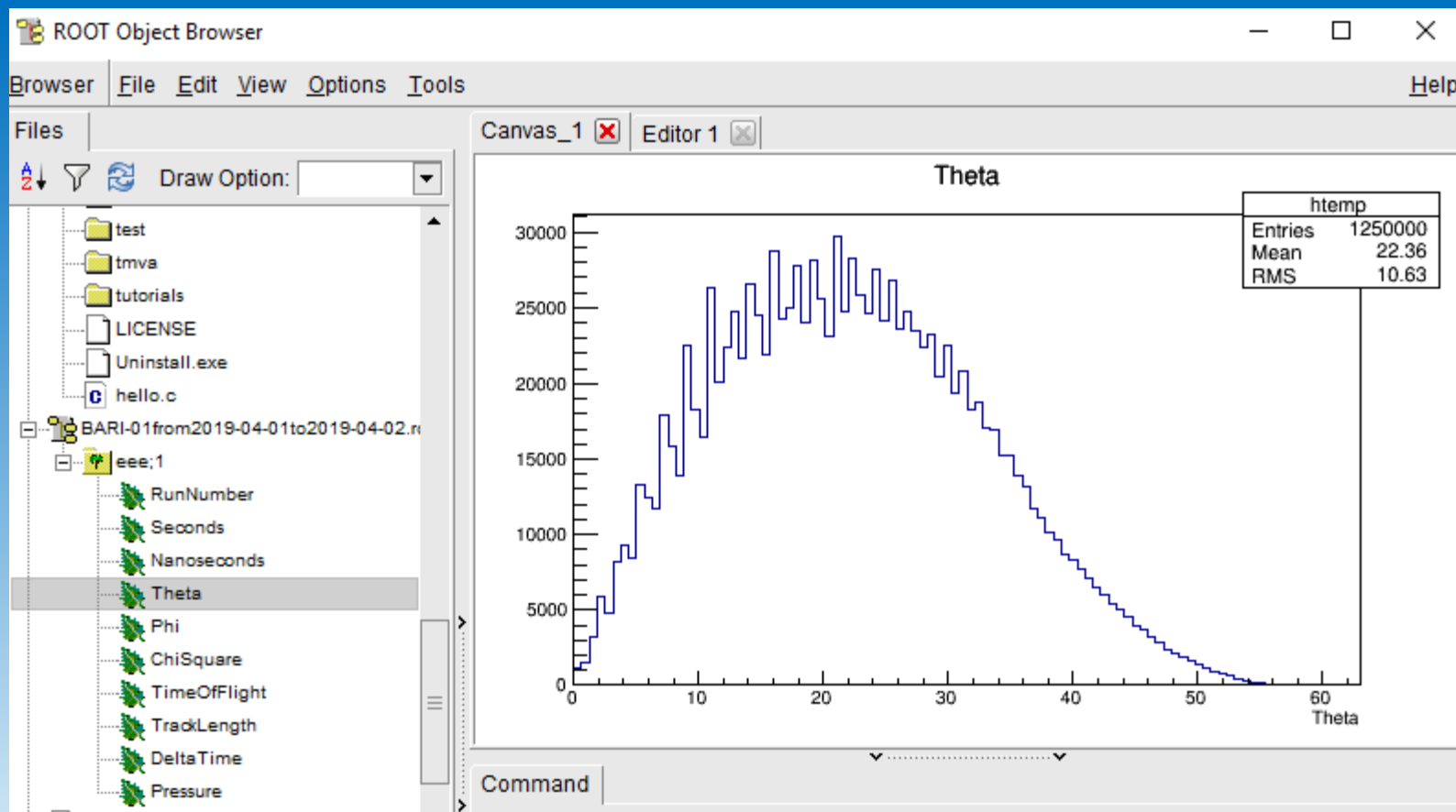
ELOG Query - Mo...

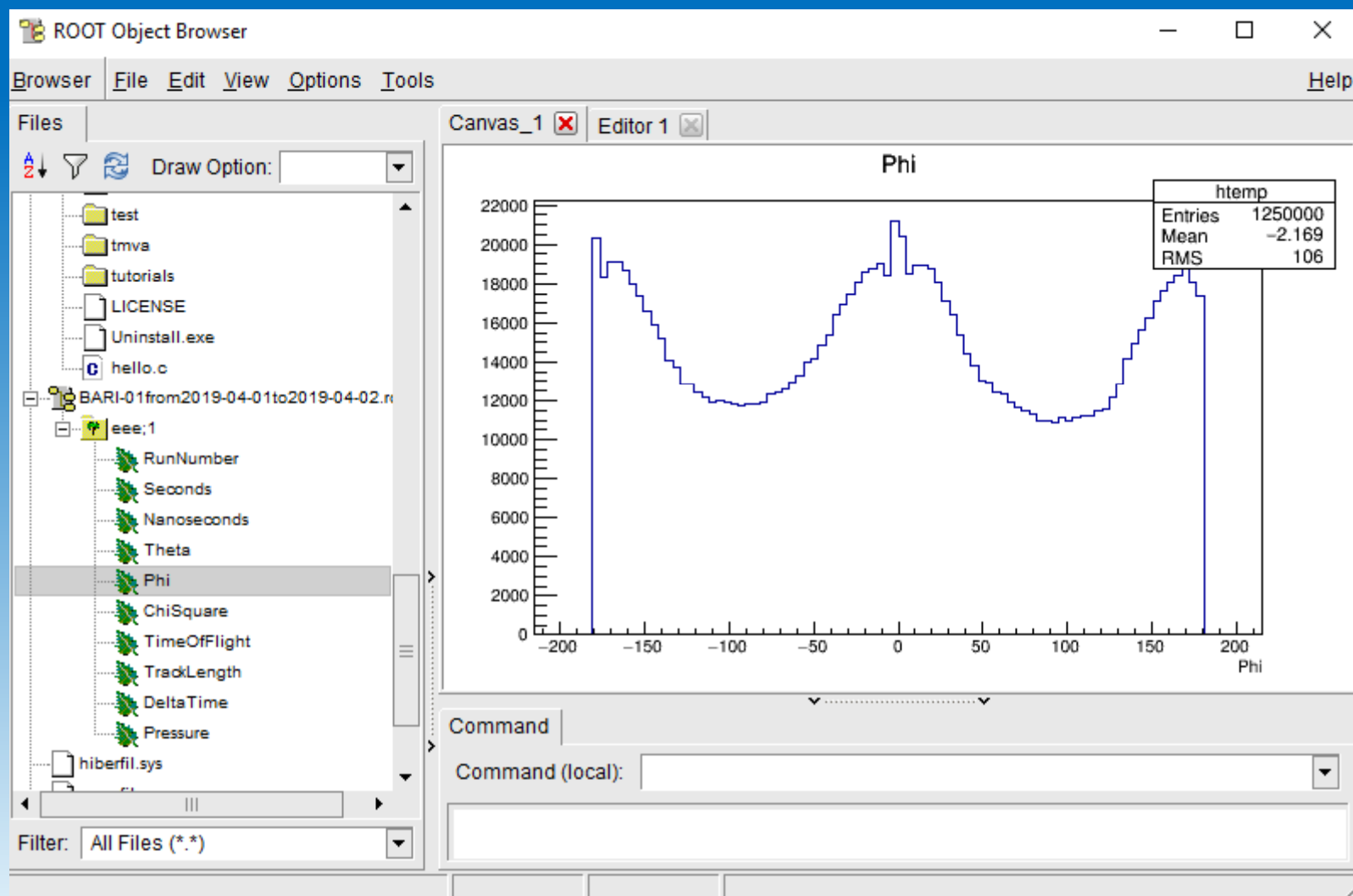
Sceleziona ROOT s...

ELOG V2 #32458

The Class TBrancher:







RUN MEETING - 10/10/2017 14