This page explains how to access the server containing the plasma reconstruction code.

Loging in

You may login using a generic user and password that will be provided to you in the computer room. The login is made through <u>SSH</u>. A good open-source <u>SSH</u> client for Windows is <u>PuTTy</u>. Another possibility is to install the <u>openSSH</u> implementation for Windows. Once logged in the machine, start the VNC server with the command VNCServer, which will automatically alocate a port. You will have a result similar to this:

```
[IST-CFN@localhost ~]$ vncserver
```

```
New 'localhost.localdomain:2 (IST-CFN)' desktop is localhost.localdomain:2
```

```
Starting applications specified in /home/IST-CFN/.vnc/xstartup
Log file is /home/IST-CFN/.vnc/localhost.localdomain:2.log
```

For you to connect the VNC server, you will need a client that, in case you don't have one installed, it can be downloaded <u>here</u> for free. You can now connect with your client using the address 193.136.137.102:X where X is the port number given by the VNC server (193.136.137.102:2 in the above example). After you finish your work, you should stop the vncserver with the comand vncserver -kill :X.

Running the code

The code is located in the directory /home/IST-CFN/workspace/bessel/. To run it, simply type fourierBessel010_ISTTOK, "params_ISTTOK.dat", SHOTNUM = <N> on the IDL prompt, where <N> is the number of the shot. A graph will appear showing the data for the frontal sensors and waits until you selected a region of interest by clicking in the start and end of that region. When it finishes, directory starting with "s" an endding int he number of shot will exist, containing PS files with the reconstructions.

Converting to other formats

The computer includes a tool can allows you to convert these images into many formats. Simply run, inside the directory with the images mogrify -format <format> *.ps, where <format> is the extension of the desired format. After this, it's advisable to rotate them 270°, for them to be in the correct position: mogrify -rotate 270 *.<format>.

Creating a movie

It is also possible to create an AVI movie of the shot's reconstruction, without previously running IDL, by running ./tomomovie <N> in the directory /home/IST-CFN/workspace/bessel/, where <N> is the number of the shot.