Downloading and Installing pjnmr (3.0.4)

Go the the following website and set up an account:

http://www.nanuc.ca/downloads/downloads login.php

Once you create an account, login and you should be taken to the software download page:

http://www.nanuc.ca/downloads/downloads_main.php

Under the 'Software' heading, you should see a link (icon) to PJNMR. Click that link:

http://www.nanuc.ca/downloads/pjnmr.php

Under the heading PJNMR V.3.0.x is a link to 'Download PJNMR'. Click that link and the file 'pjnmr-v3.0.4.tar' should download.

Move the file 'pjnmr-v3.0.4.tar' to your desktop.

Follow the instructions below for your system (MacOS or LINUX).

MacOS:

Open a terminal window. Navigate to the home directory (below is an example for a user named 'harvey' on a computer/filesystem called MacBook-Pro

```
MacBook-Pro:~ harvey$ cd /Users/harvey
MacBook-Pro:~ harvey$ pwd
/Users/harvey
```

Make a directory ('**mkdir**') called 'pjnmr-v3.0.4', then '**cd**' into that directory and use '**pwd**' to confirm that you are in the correct directory.

```
MacBook-Pro:~ harvey$ mkdir pjnmr-v3.0.4
MacBook-Pro:~ harvey$ cd /Users/harvey/pjnmr-v3.0.4
MacBook-Pro:pjnmr-v3.0.4 harvey$ pwd
/Users/harvey/pjnmr-v3.0.4
```

Copy ('**cp**') the 'pjnmr-v3.0.4.tar' file <u>from</u> the Desktop <u>to</u> the '/Users/Harvey/pjnmr-v3.0.4' directory. Then use '**ls**' to confirm that the file is properly copied.

```
MacBook-Pro:pjnmr-v3.0.4 harvey $ cp /Users/harvey/Desktop/pjnmr-v3.0.4.tar /Users/harvey/pjnmr-v3.0.4/pjnmr-v3.0.4.tar
MacBook-Pro:pjnmr-v3.0.4 harvey $ 1s
pjnmr-v3.0.4.tar
```

Use the following command to unpack ("untar") the tar archive. Then use '**Is -F**' to confirm that a new folder named 'pjnmr.app' is now in this directory, in addition to the 'pjnmr-v3.0.4.tar' file.

```
MacBook-Pro:pjnmr-v3.0.4 harvey $ tar -xvf pjnmr-v3.0.4.tar
MacBook-Pro:pjnmr-v3.0.4 harvey $ 1s -F
pjnmr-v3.0.4.tar pjnmr.app/
```

Change directory ('cd') to the 'pjnmr.app' directory. Type 'ls -F' to confirm the contents of this directory as shown below.

Notice that the 'Install' file has an asterisk next to it ('Install*') when the 'Is -F' command is used. This means that the file is executable (it is a program that is ready to run). You can also find this out using the 'Is -al' command as shown below.

```
MacBook-Pro:pjnmr-v3.0.4 harvey $ 1s -al Install -rwxr-xr-x@ 1 harvey staff 1727 Oct 9 2008 Install
```

Notice the string of characters at the beginning of the line. In particular, you'll see that there are three 'x' characters. These indicate the program is executable, so, when you try to run it (see below), it will run. If you do NOT see the asterisk when you use 'ls -F', then the program will probably not run. You'll need to make the program executable with the 'chmod' command.

```
MacBook-Pro:pjnmr-v3.0.4 harvey $ chmod 755 Install
```

Once the 'chmod' command is entered, the 'Is -F' command will reveal the asterisk behind the filename, and the 'Is -al' command will show the string of characters that include the three 'x' characters.

The string of characters revealed by the 'ls -al' command represent what are called the 'file permissions', and the 'chmod' command is used to change file permissions. You can read more about this in the "man pages" with the command 'man chmod'.

The "Install" file is an executable file (program) that will install pjnmr. Run this program as described below ('./Install'). You will then be asked where to install pjnmr (the full path). Provide the path as shown below ('/Users/harvey/pjnmr-v3.0.4')

MacBook-Pro:pjnmr-v3.0.4 harvey \$./Install

Where do you want to install pjnmr, (Give the full path name) [/usr/local/packages]? /Users/harvey/pjnmr-v3.0.4

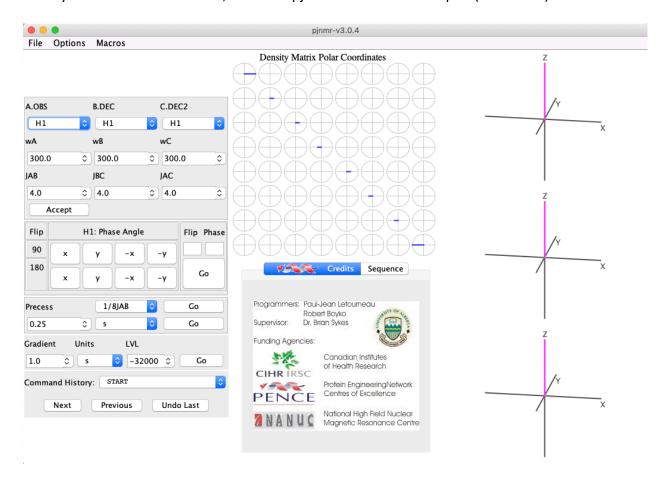
Once you provide the path and hit 'return', the following message will appear.

```
Users can run the program by typing:
/Users/harvey/pjnmr-v3.0.4/pjnmr/pjnmr
```

So, this is the command ('/Users/harvey/pjnmr-v3.0.4/pjnmr/pjnmr') that you will use to run pjnmr. Before running pjnmr, you might want to go into your 'pjnmr-v3.0.4' directory, and issue the command from there. You can then save any results that you want to in that directory. However, using the command above, you can run pjnmr from any directory.

MacBook-Pro:pjnmr-v3.0.4 harvey \$ cd /Users/harvey/pjnmr-v3.0.4 MacBook-Pro:pjnmr-v3.0.4 harvey \$ /Users/harvey/pjnmr-v3.0.4/pjnmr/pjnmr

Once you enter that command, the main pjnmr window should open (see below)



LINUX:

The following instructions are for a system running CentOS 6.7. The instructions should work for most versions of LINUX.

Open a terminal window. Navigate to the home directory (below is an example for a user named 'ragnar' on a computer/filesystem called viking)

```
[ragnar@viking ~]$ cd /home/ragnar
[ragnar@viking ~]$ pwd
/home/ragnar
```

Make a directory ('**mkdir**') called 'pjnmr-v3.0.4', then '**cd**' into that directory and use '**pwd**' to confirm that you are in the correct directory.

```
[ragnar@viking ~]$ mkdir pjnmr-v3.0.4
[ragnar@viking ~]$ cd /home/ragnar/pjnmr-v3.0.4
[ragnar@viking pjnmr-v3.0.4]$ pwd
/home/ragnar/pjnmr-v3.0.4
```

Copy ('**cp**') the 'pjnmr-v3.0.4.tar' file <u>from</u> the Desktop <u>to</u> the '/home/ragnar/pjnmr-v3.0.4' directory. Then use '**ls**' to confirm that the file is properly copied.

```
[ragnar@viking pjnmr-v3.0.4]$ cp /home/ragnar/Desktop/pjnmr-v3.0.4.tar
/home/ragnar/pjnmr-v3.0.4/pjnmr-v3.0.4.tar
[ragnar@viking pjnmr-v3.0.4]$ ls
pjnmr-v3.0.4.tar
```

Use the following command to unpack ("untar") the tar archive. Then use '**Is -F**' to confirm that a new folder named 'pjnmr.app' is now in this directory, in addition to the 'pjnmr-v3.0.4.tar' file.

```
[ragnar@viking pjnmr-v3.0.4]$ tar -xvf pjnmr-v3.0.4.tar
[ragnar@viking pjnmr-v3.0.4]$ ls -F
pjnmr.app/ pjnmr-v3.0.4.tar
```

Change directory ('cd') to the 'pjnmr.app' directory. Type 'ls -F' to confirm the contents of this directory as shown below.

```
[ragnar@viking pjnmr-v3.0.4]$ cd ./pjnmr.app
[ragnar@viking pjnmr.app]$ ls -F
Contents/ docs/ Install* README
```

Notice that the 'Install' file has an asterisk next to it ('Install*') when the 'Is -F' command is used. This means that the file is executable (it is a program that is ready to run). You can also find this out using the 'Is -al' command as shown below.

```
[ragnar@viking pjnmr-v3.0.4]$ ls -al Install
-rwxr-xr-x. 1 ragnar staff 1727 Oct 9 2008 Install
```

Notice the string of characters at the beginning of the line. In particular, you'll see that there are three 'x' characters. These indicate the program is executable, so, when you try to run it (see below), it will run. If you do NOT see the asterisk when you use 'ls -F', then the program will probably not run. You'll need to make the program executable with the 'chmod' command.

```
[ragnar@viking pjnmr-v3.0.4]$ chmod 755 Install
```

Once the 'chmod' command is entered, the 'Is -F' command will reveal the asterisk behind the filename, and the 'Is -al' command will show the string of characters that include the three 'x' characters.

The string of characters revealed by the 'Is -al' command represent what are called the 'file permissions', and the 'chmod' command is used to change file permissions. You can read more about this in the "man pages" with the command 'man chmod'.

The "Install" file is an executable file (program) that will install pjnmr. Run this program as described below ('./Install'). You will then be asked where to install pjnmr (the full path). Provide the path as shown below ('/home/ragnar/pjnmr-v3.0.4')

```
[ragnar@viking pjnmr.app]$ ./Install
```

```
Where do you want to install pjnmr, (Give the full path name) [/usr/local/packages]? /home/ragnar/pjnmr-v3.0.4
```

Once you provide the path and hit 'return', the following message will appear.

```
Users can run the program by typing: /home/ragnar/pjnmr-v3.0.4/pjnmr/pjnmr
```

So, this is the command ('/home/ragnar/pjnmr-v3.0.4/pjnmr/pjnmr') that you will use to run pjnmr. Before running pjnmr, you might want to go into your 'pjnmr-v3.0.4' directory, and issue the command from there. You can then save any results that you want to in that directory. However, using the command above, you can run pjnmr from any directory.

```
[ragnar@viking pjnmr.app]$ cd /home/ragnar/pjnmr-v3.0.4
```

[ragnar@viking pjnmr-v3.0.4]\$ /home/ragnar/pjnmr-v3.0.4/pjnmr/pjnmr

Once you enter that command, the main pjnmr window should open (as shown above at the end of the MacOS section).