Here are the steps for you to do to gain access to servers:

1. Install Penn State's VPN (downloads.its.psu.edu)

Launch Penn State's VPN and login with your Penn State username and

password.

2. Mac OS X

1. Install XQuartz on your Mac, which is the official X server software

for Mac

2. Run Applications > Utilities > XQuartz.app

3. Right click on the XQuartz icon in the dock and select Applications >

Terminal. This should bring up a new xterm terminal windows.

4. In this xterm windows, ssh into the linux system of your choice using

the -X argument (secure X11 forwarding). For example, to log into

BK-AVP-R1.bk.psu.edu you would run something like:

4. ssh -Y [your\_username@BK-AVP-R1.bk.psu.edu](https://webmail.psu.edu/webmail/retrieve.cgi?mailbox=trash&start_num=0&limit=50&sort=0&display=4&timestamp=20180123104736&mid=31d90de9%2ddd38%2ddd7b%2d5297%2d792a07b42fa8%40psu%2eedu)

3. Windows

1. Install the Xming software. <https://sourceforge.net/projects/xming/>

2. If you have not already done so, download putty.exe from the PuTTY

site and install it. <https://www.chiark.greenend.org.uk/~sgtatham/putty/>

3. Run Xming on your PC to start the X server. You should see the Xming

icon in the taskbar if it is running (although you may have to click the

little arrow in the taskbar to see it)

4. Run PuTTY and set things up as follows:

5. - Enter the server name in Host Name (BK-AVP-R1.bk.psu.edu)

6. - Make sure the Connection type is set to SSH

7. - Enable X11 forwarding (Connection > SSH > X11)

8. Log in using your\_username and passphrase

**Putty and jyputer notebooks on servers**

Choose SSH ->tunnel

In tunnel: -source: localhost:8890

-destination: localhost:8890

-click on local post

**SSH and jupyter notebook:**

To run Jupyter notebooks on the server, do the following:

   ssh -4 -XY -L localhost:8890:localhost:8890  avp5627@146.186.234.249  
CHANGE avp5627 to your USERNAME

First time usage:

1. Go to github folder and type:
2. cd GIT/PSU-PHYS296/Python
3. source ./setup
4. cd external
5. ./install

Any time after that:

1. Go to github folder enter :
2. cd GIT/PSU-PHYS296/Python
3. source ./setup
4. cd notebooks
5. jupyter-notebook --ip=127.0.0.1 --no-browser --port=8890

step3) look for this  
  
  Copy/paste this URL into your browser when you connect for the first time,  
   to login with a token:  
       <http://127.0.0.1:8896/?token=e9085183f3a83e2be8febb007037f424ab65138aad8b9ea0>

Notice: 8890 is the port that you open and it should be specific for you, change it to 8891, or 8892 etc if the port is already being used