

Let's get started: setting up python

We will be using the Anaconda Python distribution, available www.anaconda.com/download

- Option 1: **install python3 and jupyter on your own laptop/tablet**
- Option 2: you're at workstation in PAS 272, connect to UNIX cluster phys-noether
- Option 3: connect to UNIX cluster phys-noether using X2Go Client from your own laptop/tablet
- Post in the zoom chat when you're done, and what Option you did - then help others

Option 1: Installation on your own device

- for Windows: <https://docs.anaconda.com/anaconda/install/windows/>
- for OsX: <https://docs.anaconda.com/anaconda/install/mac-os/>
- for LINUX: <https://docs.anaconda.com/anaconda/install/linux/>

You will first be asked to review the license agreement. Hit ``enter" and page down with the space bar until you are asked to approve. Type ``yes" and hit ``enter".

Next you will be asked for a location into which to install the distribution. I use .anaconda3 instead of the default, since this is a hidden file and I am less likely to erase it!

All of the Python packages we will be using will be installed into your account under the directory you specified. This will take quite some time to complete. When you are asked ``Do you wish the installer to initialize Anaconda3 by running conda init?", answer ``yes".

Next update the installation to the latest version by typing

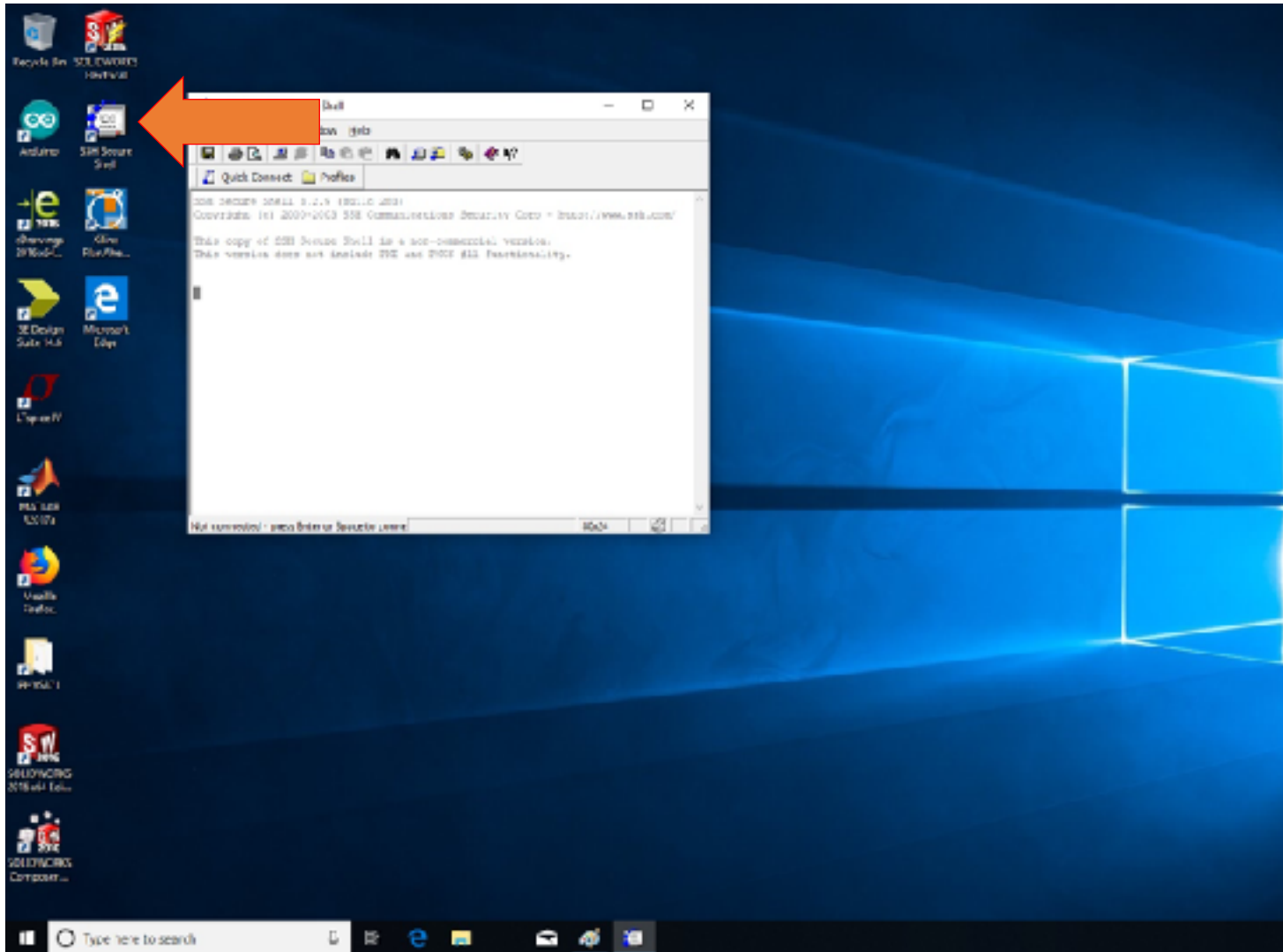
```
> conda update conda
```

Answer ``y" when asked if you wish to update, and wait for the update to finish. You now have a working Python distribution installed in your account.

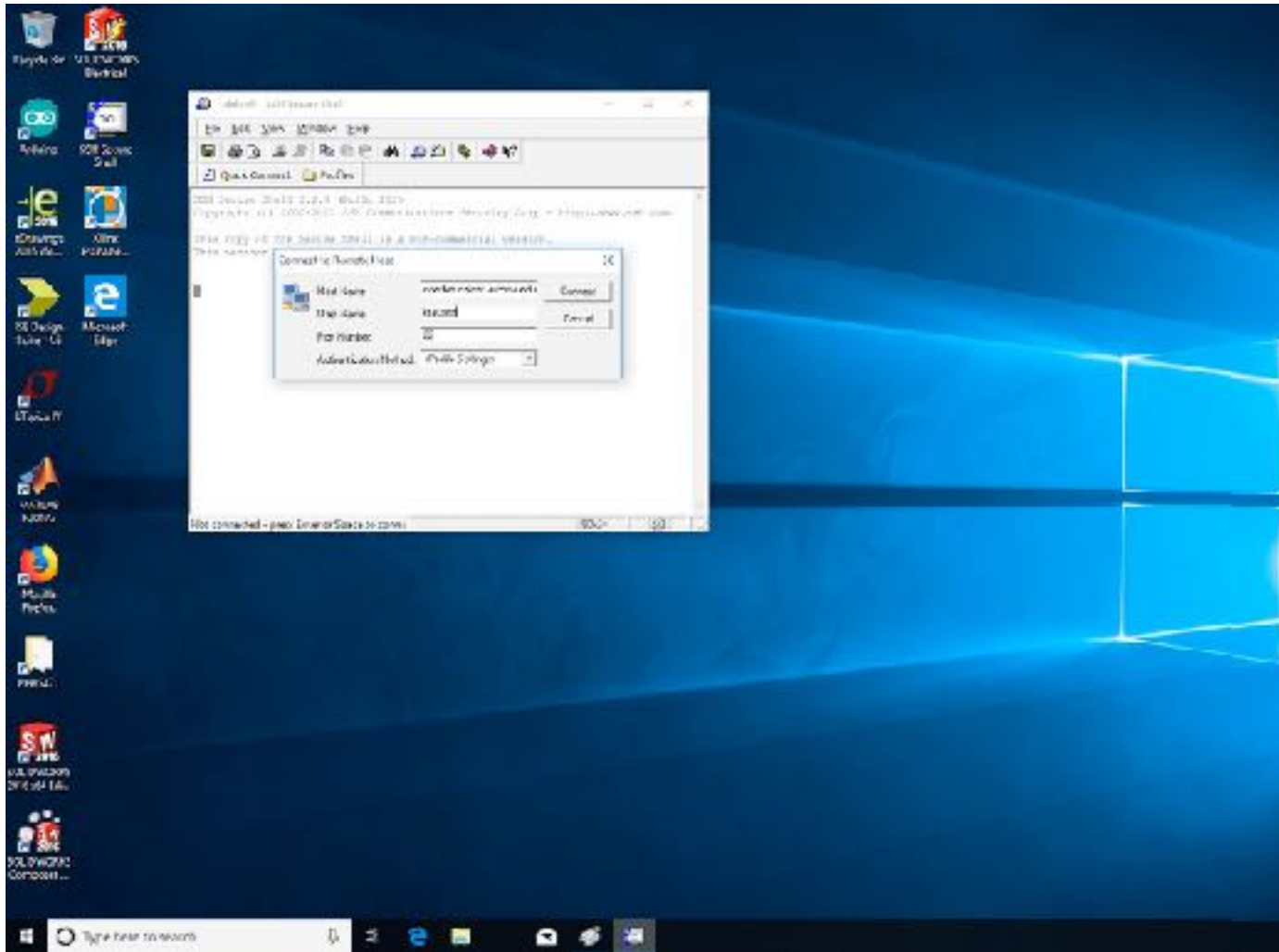
- Download test.py from D2L, and run (in the directory with test.py)

```
> python test.py
```

Option 2: PAS 272 - log in to UNIX cluster in



Option 2: PAS 272- log in to UNIX cluster



hostname:
phys-noether.catnet.arizona.edu

username: UA NetID

Password: UA NetID password

Option 2: PAS 272 - running python

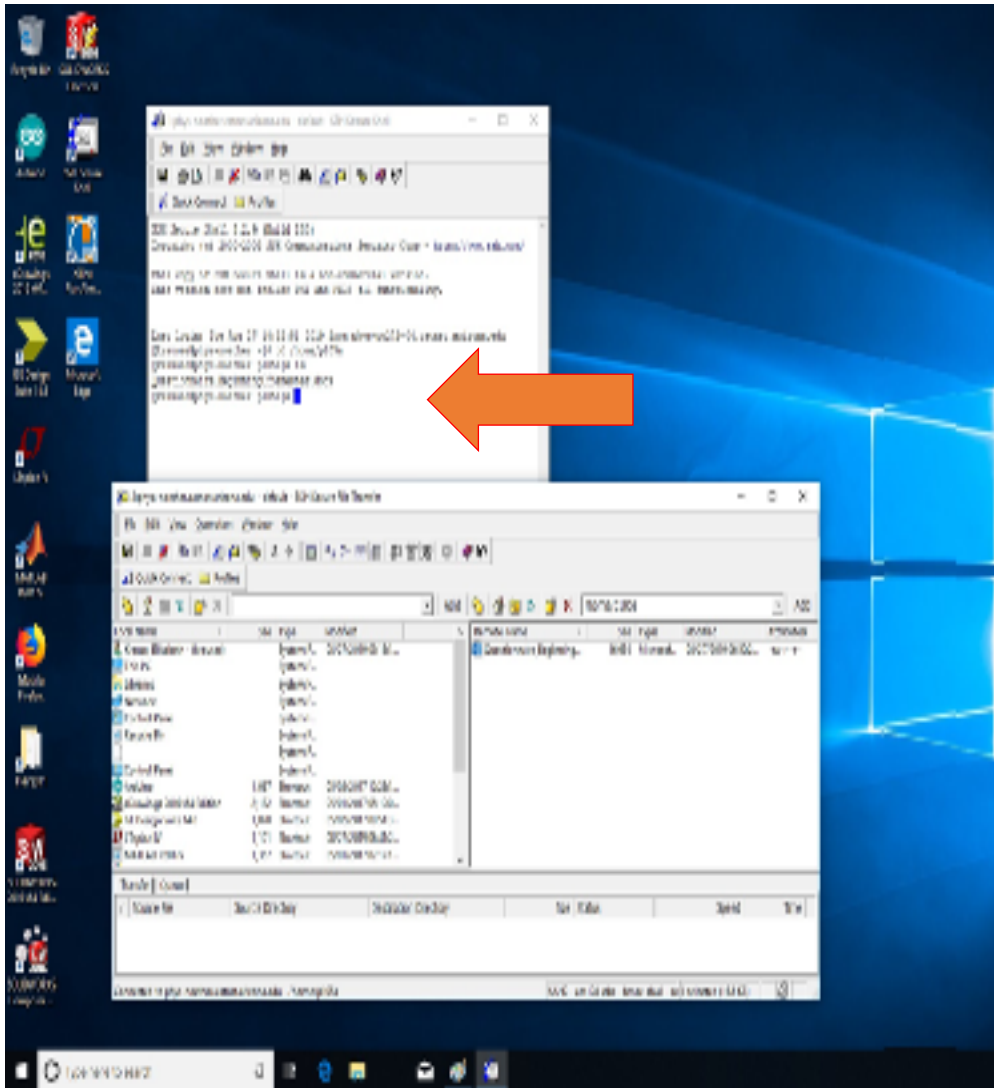
In the terminal window:
run python on the command line

\$ python

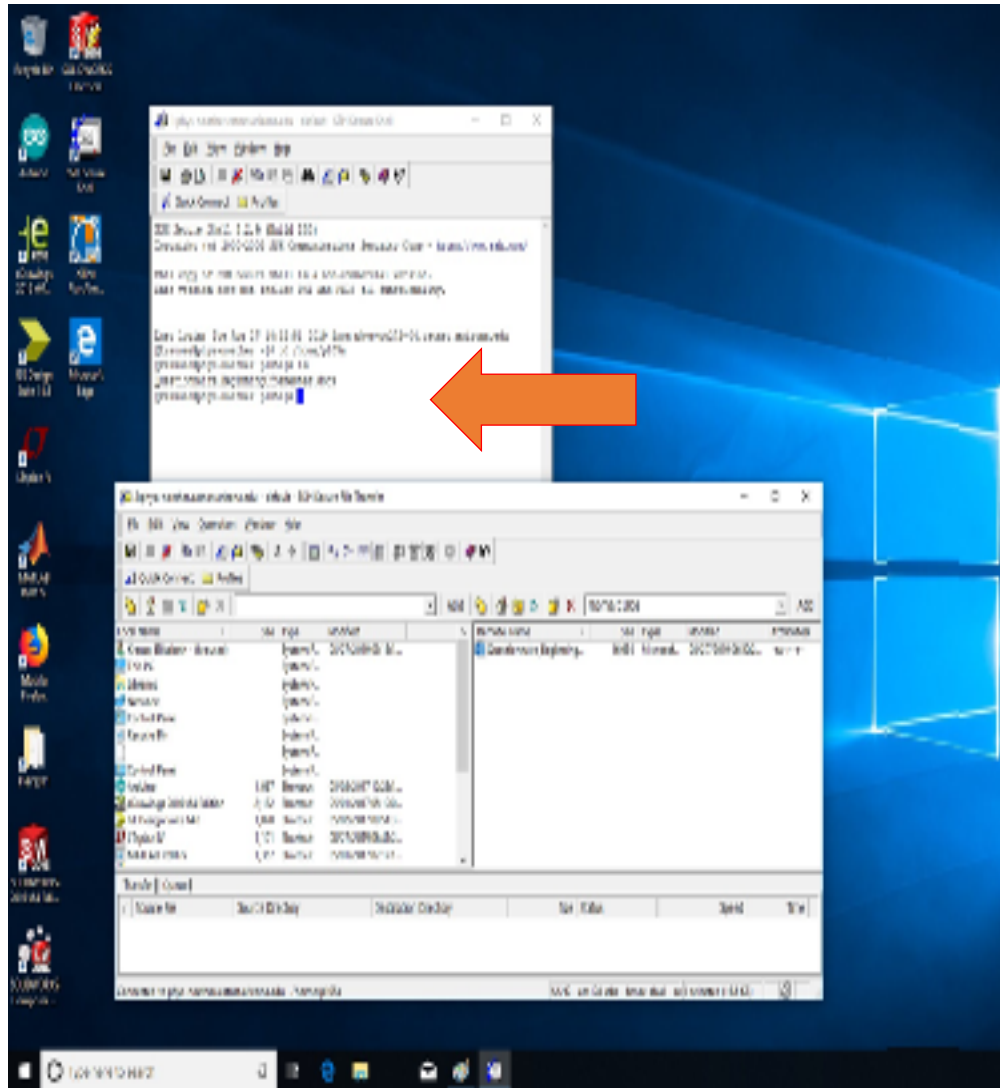
use python as a calculator

>>> 2+3

>>> exit()



Option 2: PAS 272 - running python



In the terminal window:
run python on the command line

```
$ python
```

use python as a calculator

```
>>> 2+3
```

```
>>> exit()
```

copy test program

```
$ cp /home/krausee/phys305/test.py .
```

Execute python program test.py

```
$ python test.py
```

Are you running phyton3?

Option 3: X2Go Client

Open a browser and go to <http://wiki.x2go.org/doku.php/download:start>.

If you have a Microsoft Windows laptop, under “X2Go Client”, click on Download “mswin”. If you have a Mac laptop, click on “OS X 10.11 and higher DMG” or “macOS 10.13 and higher DMG” (as appropriate). Perform the default installation as instructed.

Connect to your device to the UA VPN.

Next, fire up the X2Go client. Under “settings”, choose “New Session”. In the “Session preferences” window which appears,

- change the session name to something useful (like “Phys-Noether”)
- beside “Host” enter the fully-qualified domain name: phys-noether.catnet.arizona.edu
- beside “Login” enter your username (NETID)
- under “Session type” choose “XFCE”

Option 3: X2Go Client

Now click “OK”. There will now be a “Phys-Noether” window on the right side of the X2Go window. If you click on “800x600” you can choose a larger initial window size, e.g. 1280x1024. In any case, you should be able to resize the connection later.

Click on Phys-Noether in the white window; it will move to the left, and you can type in your password. A new window will open, giving you a desktop on Phys-Noethe. (You may see a window open complaining about “ssh” – you can ignore it.)

From now on, you can simply fire up X2go and repeat the login procedure, connecting from anywhere you have internet access.

run python on the command line

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$ python
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use python as a calculator

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>>> 2+3
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```
>>> exit()
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copy test program

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$ cp /home/krausee/phys305/test.py .
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Execute python program test.py

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