September 22, 2022 Charlie Duke

Placed in PHYSHARE\QuantumWell2022

Instructions for downloading and starting the GUI for the Quantum Well modern physics lab

For the windows machines in the modern lab:

- 1. Download the python code from Github
 - a. Enter http::\\github.com/dukecld/QuantumWell/archive/main.zip in a browser to download the zipped archive.
 - b. Drag the zipped file (you'll see it in the upper-right of your edge browser) onto your Desktop.
 - c. Right click on the file icon and choose to extract all files.
- 2. Open the file explorer on the inner QuantumWell-main folder.
 - a. Double click the config_windows.bat file which will add paths to anaconda3 folders (otherwise, python and its modules would be unavailable) and execute the config.py python module in the src folder.
 - b. The config.py module creates a startQwell.bat script both in the QuantumWell-main folder and on the Desktop
- 3. Double click the startQwell.bat file to open the QuantumWell GUI. You may copy the startQwell.bat file to any folder and work from there.

When you run the scripts, you see output on a terminal window as the script executes. I left that in place as a way to track any unexpected errors in the scripts.

This process was a bit tricky because the anaconda3 installations in the modern lab are for all Users and it's time consuming to have individual users add the anaconda3 paths to their local paths. If you're interested, have a look at the startQwell.bat file and the src/activationAnaconda.bat file.

You can also go to the start menu (list of programs) and open a terminal with an anaconda3-prompt, cd to the QuantumWell directory, and type "python quantumWell.py"

The process is more straightforward for macos. Assuming the paths to Anaconda3 are already part of the local path, execute the config_macos.command to create the startQwell.command script. Actually, I open a terminal, cd to the QuantumWell folder and type "python quantumwell.py" to open the GUI.