Open-Source Computing: Installing Anaconda

As a part of this course we will start to introduce you to scientific computing. There are many choices of programming languages and computing platforms that you could use for scientific computing. We have chosen to concentrate on the **Python** language for programming and we will introduce you to using **Jupyter** notebooks, which provide a convenient way to write text, equations, and code all in the same document.

A broadly useful approach in programming is to break a problem into small pieces, solve each piece, and then reassemble the pieces into a full solution. This approach has been used to construct a set of tools for programming in Python. The **Anaconda** package pulls these pieces together and allows you to install them as a unit. This tutorial will assist you in installing Anaconda. In the next tutorial we will help you get started using Python and, in particular, Jupyter notebooks.

This installation will take about 15 minutes, depending on your computer.

To install Anaconda:

- 1. Go to, or click on https://www.anaconda.com/download/
- 2. Select the icon for your operating system: Windows (📲), macOS (🗳), or Linux (🔊).
- 3. If you are unfamiliar with installing software on your operating system, you can get further information about the installation by clicking on the "How to Install ANACONDA" link that appears below the two download options. Otherwise, just follow your typical install procedure.
- 4. You will want the most recent Python Version (Python 3.8 as of this writing). If you have an older computer, you might need to install an older version of Python.
- 5. Part way through the installation you will be asked whether you want to install Visual Studio Code. This is not necessary yet, but will be useful later and you may as well install it now.

Once you have completed the installation you can check that it worked by going to your applications and opening the Anaconda-Navigator application. If this opens a window that allows you to choose between jupyterlab, jupyter notebook, qtconsole, etc., then your installation succeeded.