Outline

1. Intro
2. Set up coding environment
   a. Terminal / WSL
   b. Install python3 and pip3
   c. Install visual studio code
3. Python fundamentals

Intro

What is Data Science (DS)?
The science that uses a lot of data.

What does a [DS ambassador](#) do?
Promote DS literacy in the department

Why python?
- Easy to read/write
- Well supported
- Large community
- Shallow learning curve

Workshop topics
- Python
- Stats
- Computer cluster (linux)
- Data analysis in HEP
- ML/DL in physics

Terminal install (for Windows only)

Window 11
https://ubuntu.com/tutorials/install-ubuntu-on-wsl2-on-windows-11-with-gui-support#1-overview

1. Overview
2. Install WSL
3. Download Ubuntu
4. Configure Ubuntu

Skip 5 and 6

5. Install and use a GUI package
6. Enjoy Ubuntu on WSL!

Windows 10
https://ubuntu.com/tutorials/install-ubuntu-on-wsl2-on-windows-10#1-overview

1. Overview
2. Install WSL
3. Download Ubuntu
4. Configure Ubuntu

Skip 5, 6, 7

5. Install your first package
6. Customising your Terminal with Windows Terminal Preview
7. Enjoy Ubuntu on WSL!

Linux and Windows
1. sudo apt-get update
2. sudo apt-get install python3 python3-pip

Mac
1. Install homebrew
2. brew install python3 python3-pip

Install vscode: https://code.visualstudio.com/

Install vscode extensions
Must have: Python, Pylance, Code Runner
Recommend: Guides, TODO Highlight, vscode-icons
Github copilot

(speaker note: generally introduce vscode and how to use it)

Python

Tutorials
https://www.learnpython.org/
https://www.w3schools.com/python/

Exercises
https://www.codewars.com/kata/python
https://www.hackerrank.com/domains/python