Outline

- rootNest on all machines
- Running rootNest
Windows

- So windows you **CAN** get rootNest working but it’s extremely difficult so I propose a different solution.
- Virtual box: This will let you run linux from the comforts of your own windows
- But why?
- How to do it:
  - Download virtual box: [https://www.virtualbox.org/wiki/Downloads](https://www.virtualbox.org/wiki/Downloads)
RootNest

- Everyone please start root and show me that you can run RootNest
  - Unix users - type ./rootNest
  - Windows users try and build and run code

- Please be patient as I help those who need it.
Running rootNest

rootNest takes 6 inputs:
- Total number of events: We will use 1000000
- Particle type: We are using tritiated methane so CH3T or DD
- Minimum energy: 0 for CH3T and 0 for DD
- Maximum energy: 18 for CH3T 75 for DD
- Electric field: Just use -1 (default field)
- Position: Again just use -1 (random position)

So your code will look like:
- `./rootNest 1000000 CH3T 0 18 -1 -1`
- `./rootNest 1000000 DD 0 75 -1 -1`
Running rootNest

- **UN**comment line 3 (#define FIT): This will allow for Gaussian fitting and slicing
- Type make again
- Run the code with ER
- At the bottom you will see a chi squared values
- 3 columns
  - Column 1: S1c or detected photons
  - Column 2: log(S2/S1) gaussian mean per bin
  - Column 3: width **(NOT)** the error that is only for real data
- Run again but this time with DD