



Write your own McStas component

- **Aim:**

- Write a component that models a semi-permeable mirror. i.e. a mirror with reflectivity < 1, which also uses focused sampling.

- **Hints:**

- Step by step instructions in README on github / Friday – item 3
https://github.com/McStasMcXtrace/Schools/tree/master/ESS_May_2021/Friday_May_7th/3_Writing_a_component/Write_a_component
 Start with an **Arm** – it has most of the McStas structure present already.
- Focused sampling is governed by:

$$\pi_i = \frac{P}{f_{mc}}$$

π_i : weight multiplier

P : physical probability

f_{mc} : Monte Carlo probability