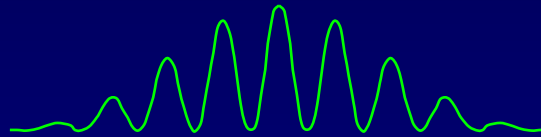# Act 2

Let's modify the 2-slit experiment a bit. Recall that EM waves can be polarized – electric field in the vertical or horizontal directions.

Send in unpolarized photons.

Cover the upper slit with a vertical polarizer
and cover the lower slit with a horizontal polarizer

Now the resulting pattern will be:

V

Unpolarized

H

??

a) $|\psi_1 + \psi_2|^2$

b) $|\psi_1|^2 + |\psi_2|^2$