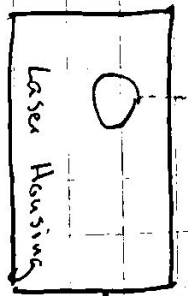


QED OVERVIEW

live insects
Leave OUT!



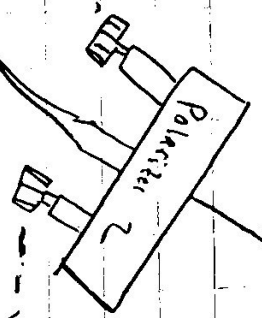
Mirror 1

1/47

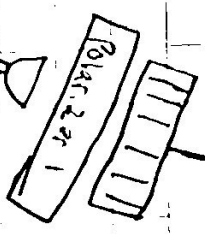
Mirror 2

1/47

Horizontal
Coupling knob



Vertical
Coupling knob



Alice

Bob's

Bob's

Fiber 2

only used
for QND.
not for
BB84)

Fiber 1
to AQD



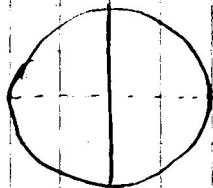
$|H\rangle$ Microc 2

$|H\rangle$

Alice's Hub \rightarrow

Bob's polarizer

Bob's detector



Birefringent,
Fast axis

Corresponding Jones matrix:

$$\begin{pmatrix} \cos 2\theta & \sin 2\theta \\ \sin 2\theta & -\cos 2\theta \end{pmatrix}$$

i.e. for 0° :

$$\begin{pmatrix} 1 & 0 \\ 0 & -1 \end{pmatrix} |H\rangle = \begin{pmatrix} 1 \\ 0 \end{pmatrix} = |H\rangle$$

Horizontal coupling mode

Vertical coupling mode

adjust these photon counts

