

Introductory stuff [a1-a4]

- a1: Diamanti's review (Entropy?)
- a2: Scarani's 2009 review (RMP)
- a3: Ulrik's review on cont. variables
- a4:

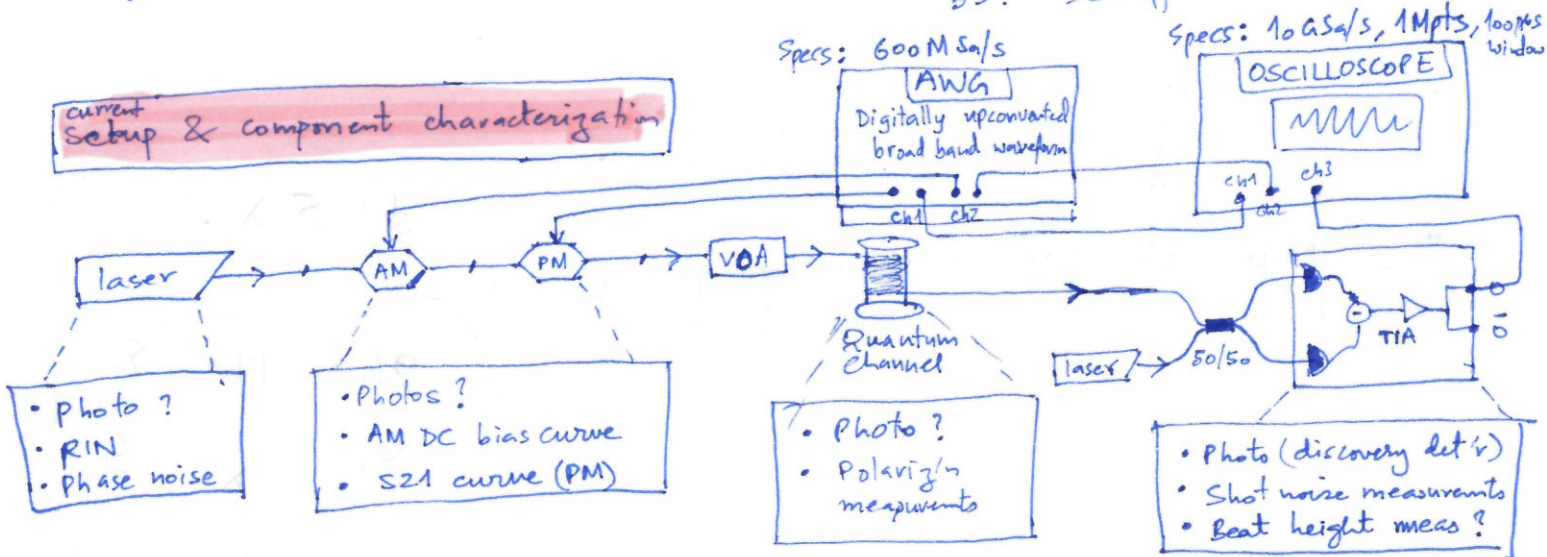
• Gaussian modulation vs. discrete modulation

CVQKD with transmitted LO vs. Real LO [b1-b5]

- Simple illustration to show the difference
- Pros and Cons
- Heterodyne detection if $\omega_{IF} \neq 0$
(expression for current could be added here)

- b1: PRX from Qi
- b2: PRX from Soh
- b3: opt. Exp. (Chinese group)
- b4: Alléume's arXiv paper
- b5: Schaeffer's (Hamburg) paper

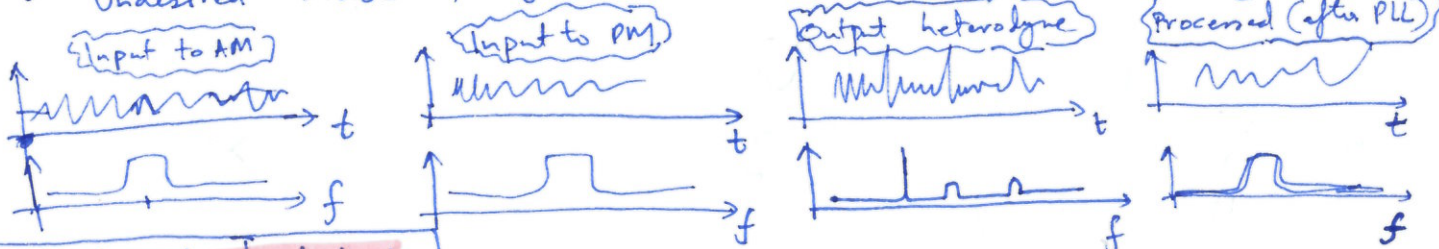
current Setup & component characterization



Preliminary results (b2b)

- Data processing performed ^{offline} in MATLAB with digital PLL to recover the ~~upconverted~~ modulated data

- Undesired sidebands ignored but in future, would be suppressed w/ OSSB.



Planned setup and tasks

- Carrier & clock recovery
- OSSB
- Replace AWG with FPGA-DAC
- Replace oscilloscope with ADC (FPGA)