



ID Quantique and Photon Counters CERN SiPM event

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ID Quantique

IDQ

- ❑ Geneva based
- ❑ Founded in 2001
- ❑ ~15 employees
- ❑ Profitable
- ❑ Focuses on the opportunities of quantum photonics
- ❑ Three product ranges

Scientific Instrumentation



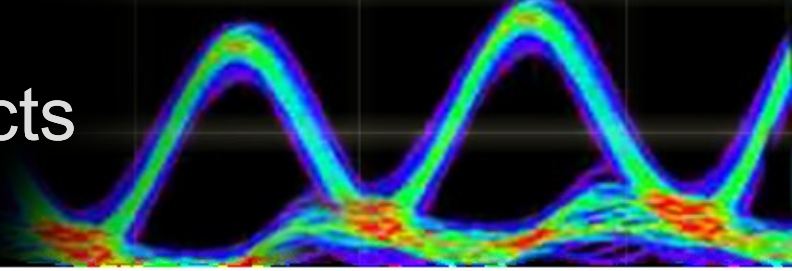
Quantum RNG



Quantum and classical Cryptography



Optical Instrumentations Products



id100 / id101 / id 150
Single Photon Detectors
at Visible wavelengths

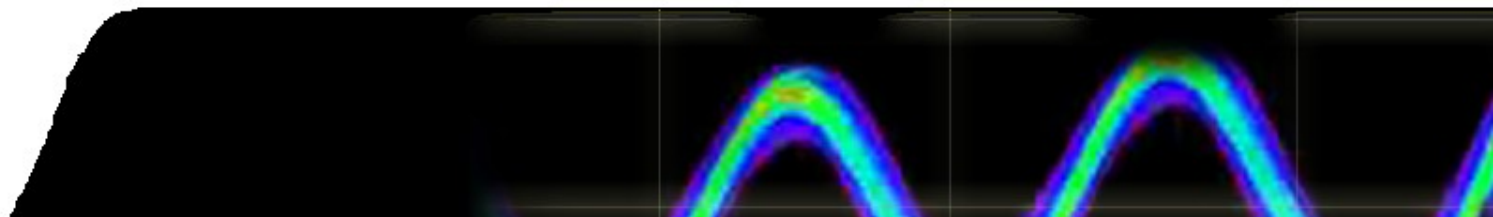
id400 Single Photon Detectors
dedicated at 1064nm



id201 Single Photon Detectors
at Near InfraRed wavelengths



id300 Short-Pulse Laser Source
at 1310nm or 1550nm



Figures of merit



Material: Si

*Quantum Efficiency:
35% @ 500 nm*

*Dark Count Rate:
2 Hz*

*After pulsing Probability
3%*

*Timing jitter:
40 ps*



Material: InGaAsP/InP

*Quantum Efficiency:
Up to 30%*

*Dark Count Rate:
150 Hz at 7.5% SPDE*

*After pulsing Probability
High*

*Timing jitter:
Typically 300 ps*



Material: InGaAs/InP

*Quantum Efficiency:
Up to 25%*

*Dark Count Rate:
10-5 per gate*

*After pulsing Probability
High*

*Timing jitter:
300 ps*

ID Quantique interest in SiPM!



ID Quantique

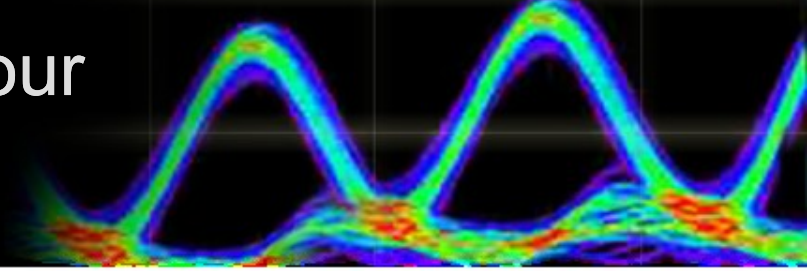
- **as a broad product range in photon counting but presently only single pixel.**
- **is very capable in introducing new technology into the market**
- **as a broad experience in industrialization**

SiPM

- **Large active area, compete with PMT**
- **All the advantage of Si based photon counter**

=> SiPM and ID Quantique is a good fit

Thank you very much for your
attention!



Visit us, we have a booth here

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Feel free to ask any questions !

