

## Optical to electrical detection delay in avalanche photodiode based detector and its interpretation

*Wednesday, June 13, 2012 12:15 PM (1h 45m)*

We are presenting a set of measurement to determination of the optical to electrical delay of the photon counting detector. The absolute value of the time interval between the time of arrival of the signal photon onto the detector input aperture and the time when the electrical output signal is exceeding the predefined level have to be determined. Also results showing a temporal relation between the optical input and the electrical output of a photodiode are presented to describe an effect used device bandwidth. The presented results are a byproduct a of more complex experiment which aims to identify the absolute delay contributors in picosecond time-resolved single photon detection technique.

**Primary author:** Dr BLAZEJ, Josef (Czech Technical University in Prague)

**Co-authors:** Prof. PROCHAZKA, Ivan (CTU in Prague); Mr KODET, Jan (CTU in Prague)

**Presenter:** Dr BLAZEJ, Josef (Czech Technical University in Prague)

**Session Classification:** Posters A