

photon counting

single-photon counting

Recording of sequential single photons counted by way of recording and counting sequential electron pulses at the anode of the photomultiplier.

Note 1: Each electron pulse consists of $10^5 - 10^6$ electrons resulting from the multiplication, in the “dynode” arrangement (or the microchannel plate) of a photomultiplier, of a single photoelectron emitted by a photosensitive layer (the photocathode of the photomultiplier) upon arrival of a single photon.

Note 2: Technique used for two purposes: (i) sensitive measurement of low levels of radiation such as those originating from a luminophore and (ii) recording of emission decays.

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