Dead Time

In TCSPC the term dead time refers to the time the TCSPC system needs armed again after detecting an event. During the dead time the TCSPC system is blind.

If for example two photons are detected with the dead time of the TCSPC device the second photon will be lost. This leads to the so called Pile-up Effect.

Note that not only TCSPC devices but also photon counting devices exhibit dead times.

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