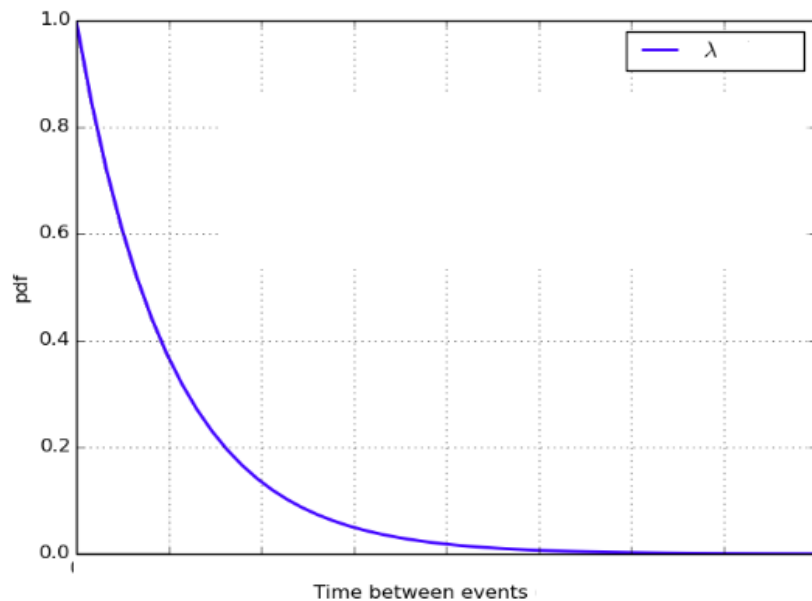
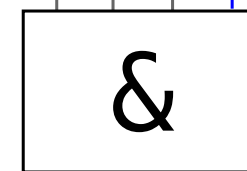


Source: ISOTDAQ 2024 "Introduction to DAQ" by A. Negri [1]



COINCIDENCE UNIT
(~ 4 x AND GATE)



NOT BUSY
(FROM DAQ)

TRIGGER
(TO DAQ)

BUSY:
While DAQ is running,
(Sampling, Digitizing,
Retrieving Data/Readout),
the **NOT BUSY** signal is
kept to logical 0.

Thus, additional trigger
pulses are blocked until
the DAQ is finished with
processing one event.

Events are (typically) not evenly distributed =>
Time between events is (again: typically) distributed according
to an inverse exponential distribution. =>
**If you target x [Hz] data rate, blocking of the trigger
has to be (much) shorter than 1/x [sec]**

[1] <https://indico.cern.ch/event/1337180/contributions/5629322/attachments/2880440/5046367/isotdaq24.Negri.DaqIntro.pdf>