

Optical photons simulation

April 11, 2018

1 Geometry and conditions

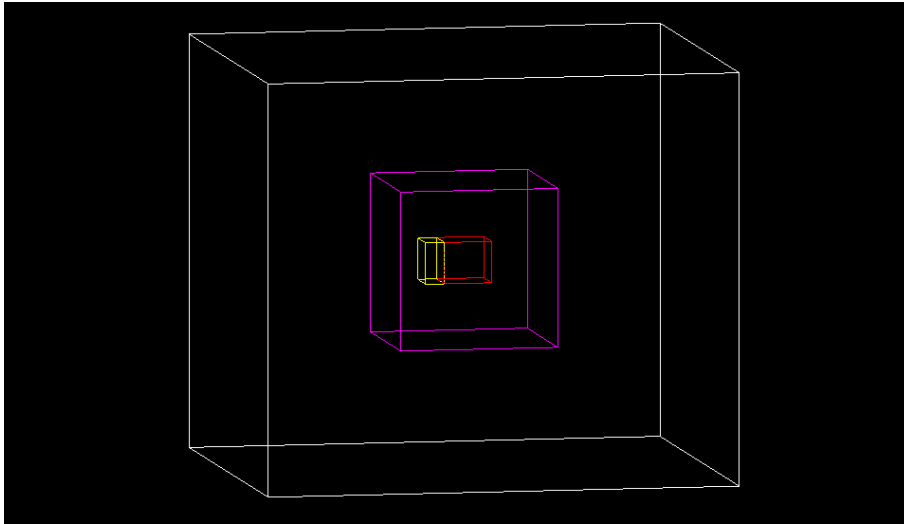


Figure 1: Geometry of the simulation.

LYSO crystal (red cube) placed in a teflon box (magenta). Centers of both boxes placed at 0 point (0, 0, 0). Photocathode(yellow) placed under crystal. Launched 1000 photons per run.

2 Results

2.1 Global time

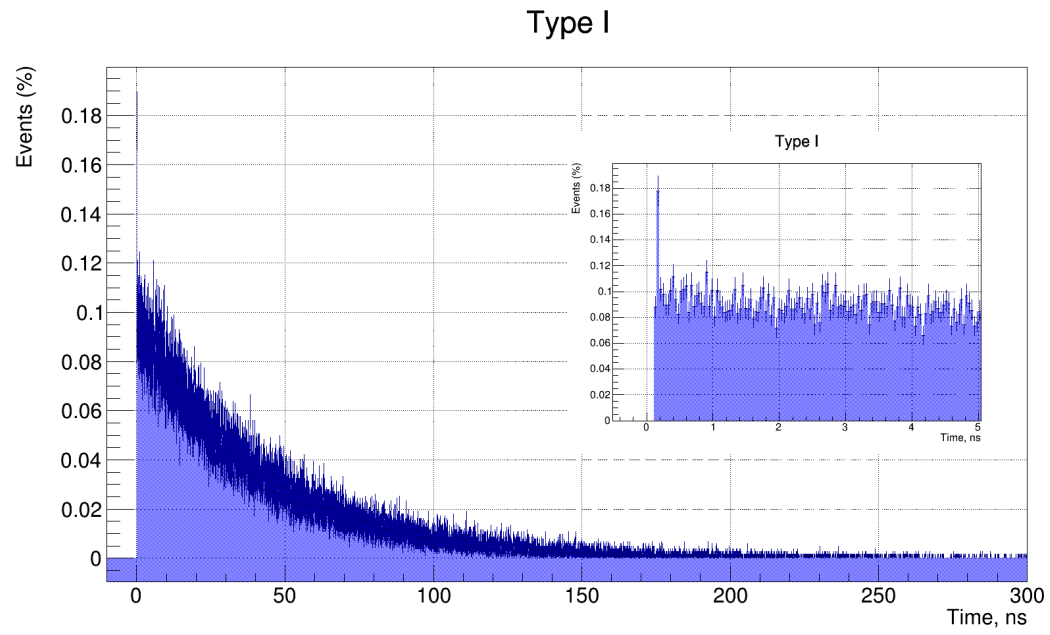


Figure 2: Optical photons global time distribution for type I events.

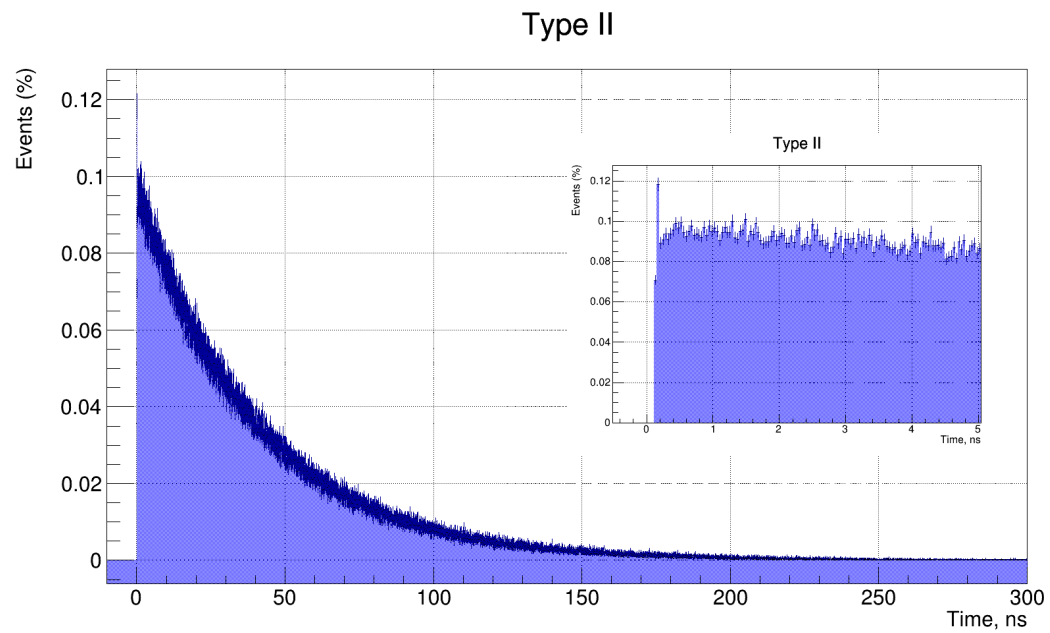


Figure 3: Optical photons global time distribution for type II events.

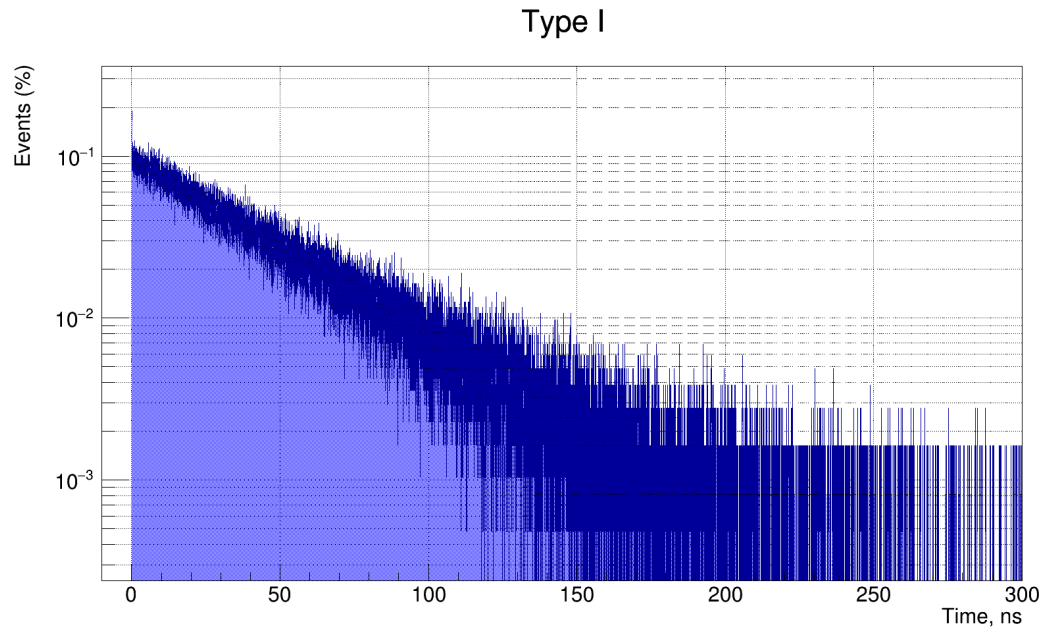


Figure 4: Optical photons global time distribution for type I events (Log scale).

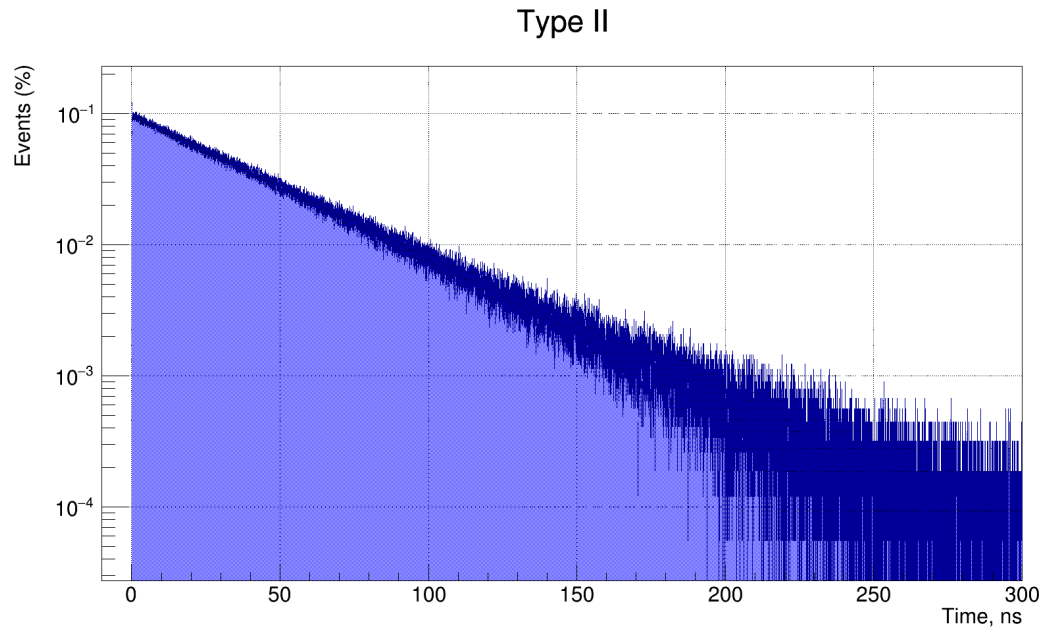


Figure 5: Optical photons global time distribution for type II events (Log scale).

2.2 Local time

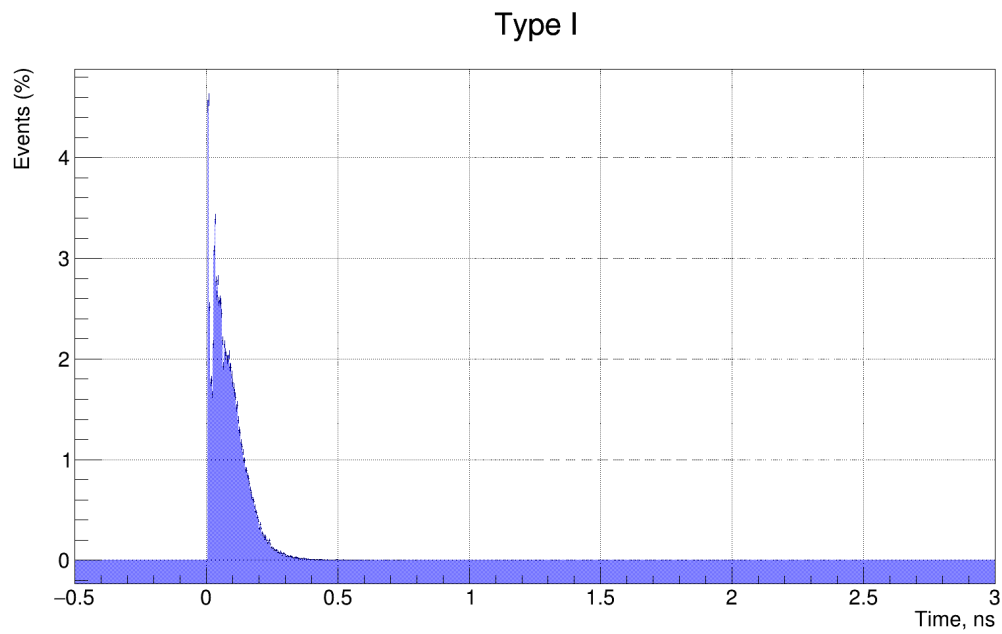


Figure 6: Optical photons local time distribution for type I events.

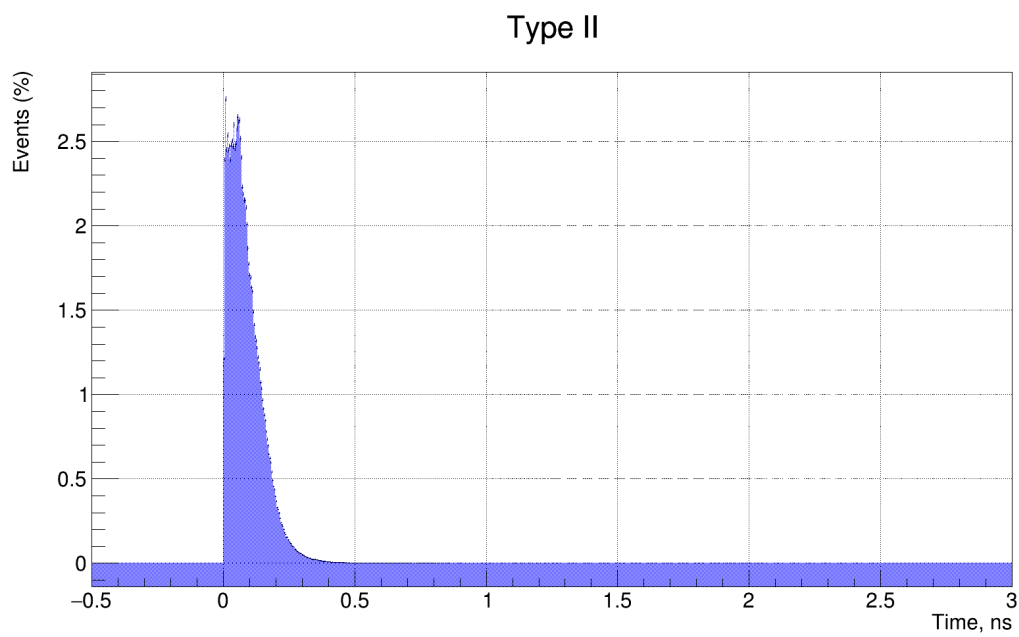


Figure 7: Optical photons local time distribution for type II events.

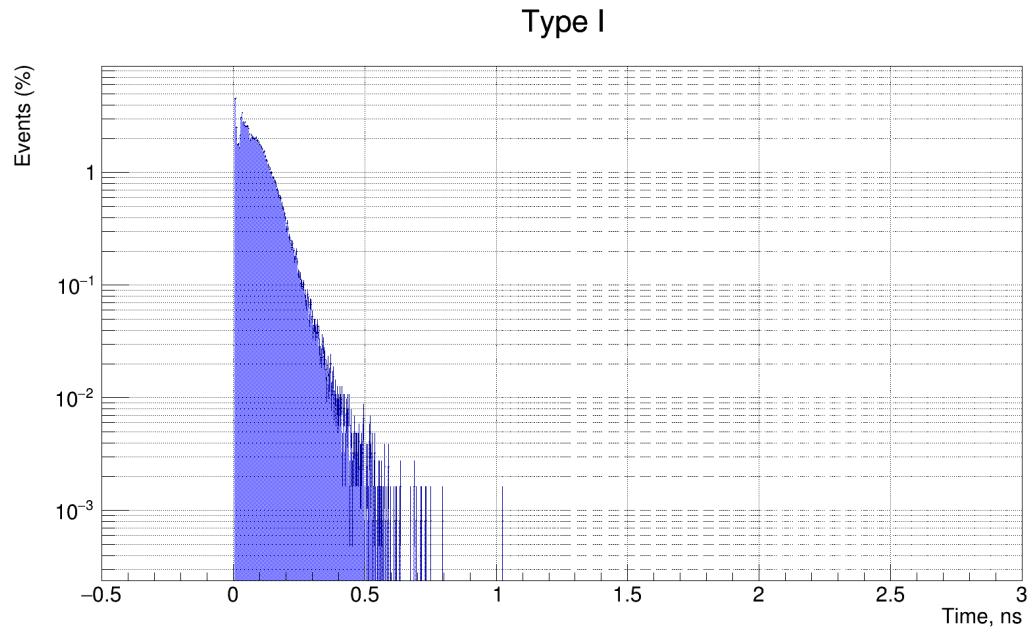


Figure 8: Optical photons local time distribution for type I events (Log scale).

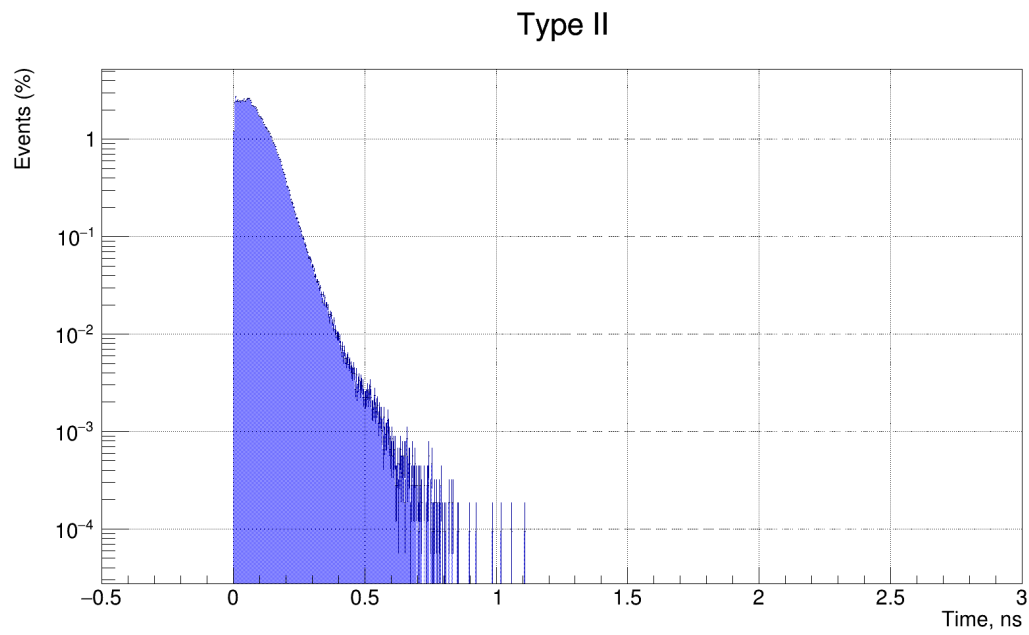


Figure 9: Optical photons local time distribution for type II events (Log scale).