

# PMT Signal Simulation

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May 18, 2020



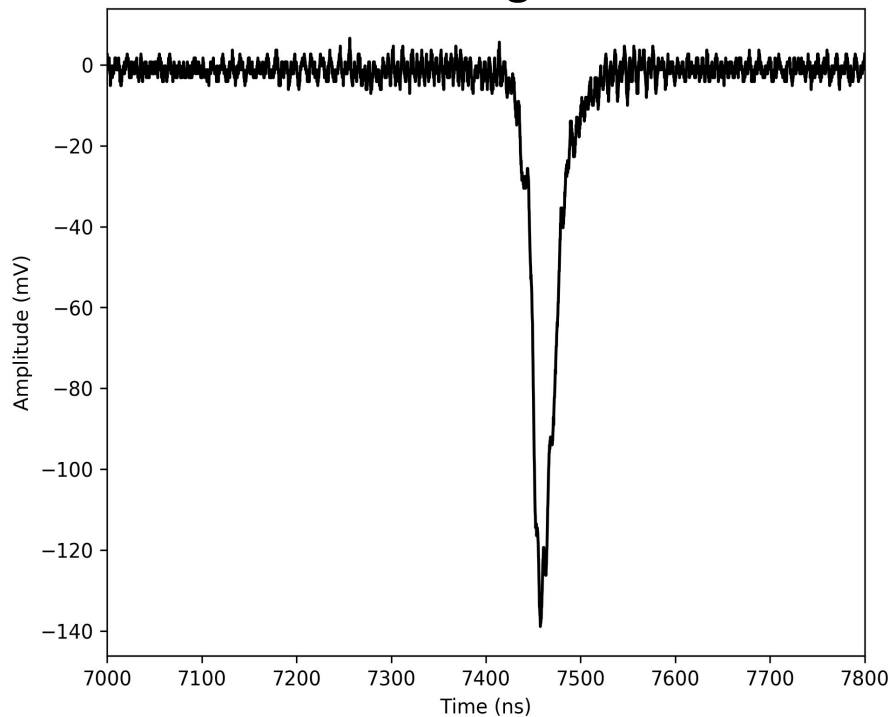
# Objectives

- ❑ Single electron signal characterization;
- ❑ Run in use: 2274;
  - ❑ 1000 events;
  - ❑ Corrupted events were discarded (4 events in this run);
  - ❑ Signal offset removed using a noise mean estimation.

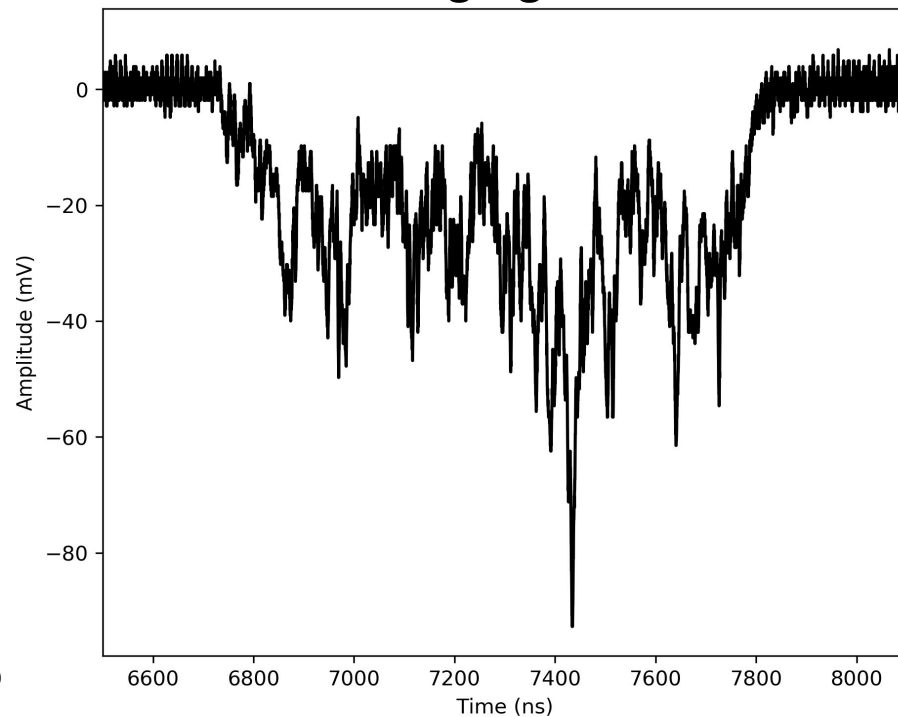
*Just starting to look at those data*

# Observed signals

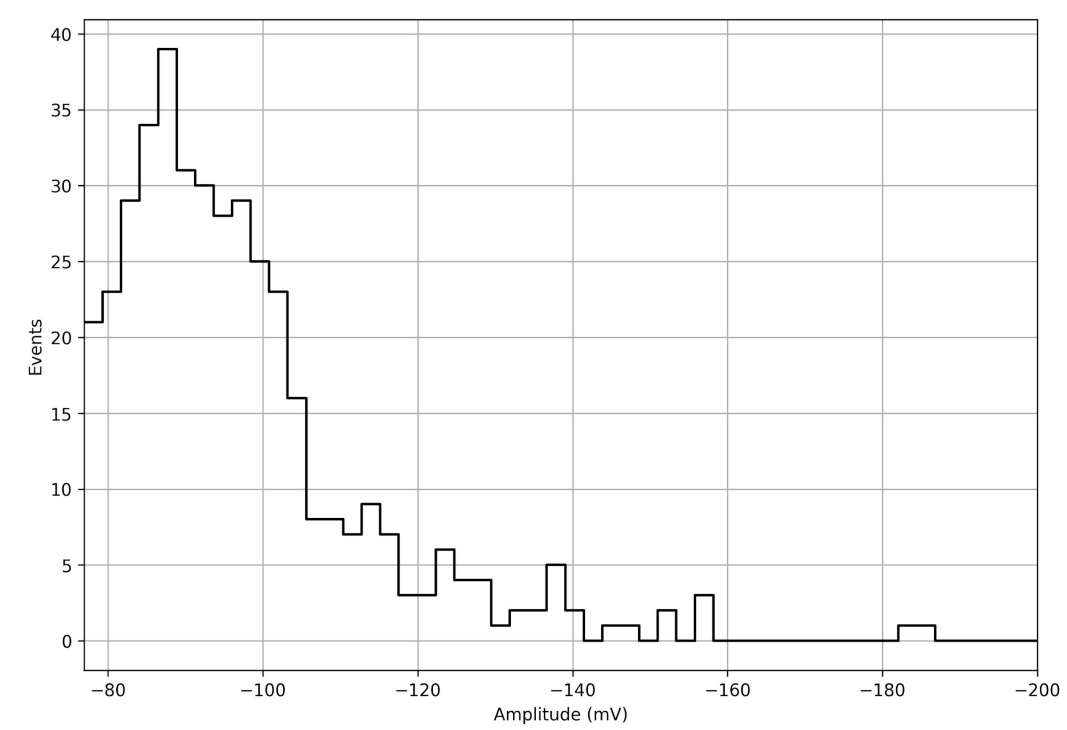
Short signal



Long signal



# Amplitude distribution



- Short signals only;
- Cut in -200 mV;
- Around 10 signals with amplitude between -200 and -500 mV.

# Next steps

- ❑ Select events of low energy by analyzing the images
  - ❑ Do an exercise with different cuts
- ❑ Evaluate signal's peak amplitude, area and width distributions
- ❑ Propose a way to select signals that would represent single electron events.

