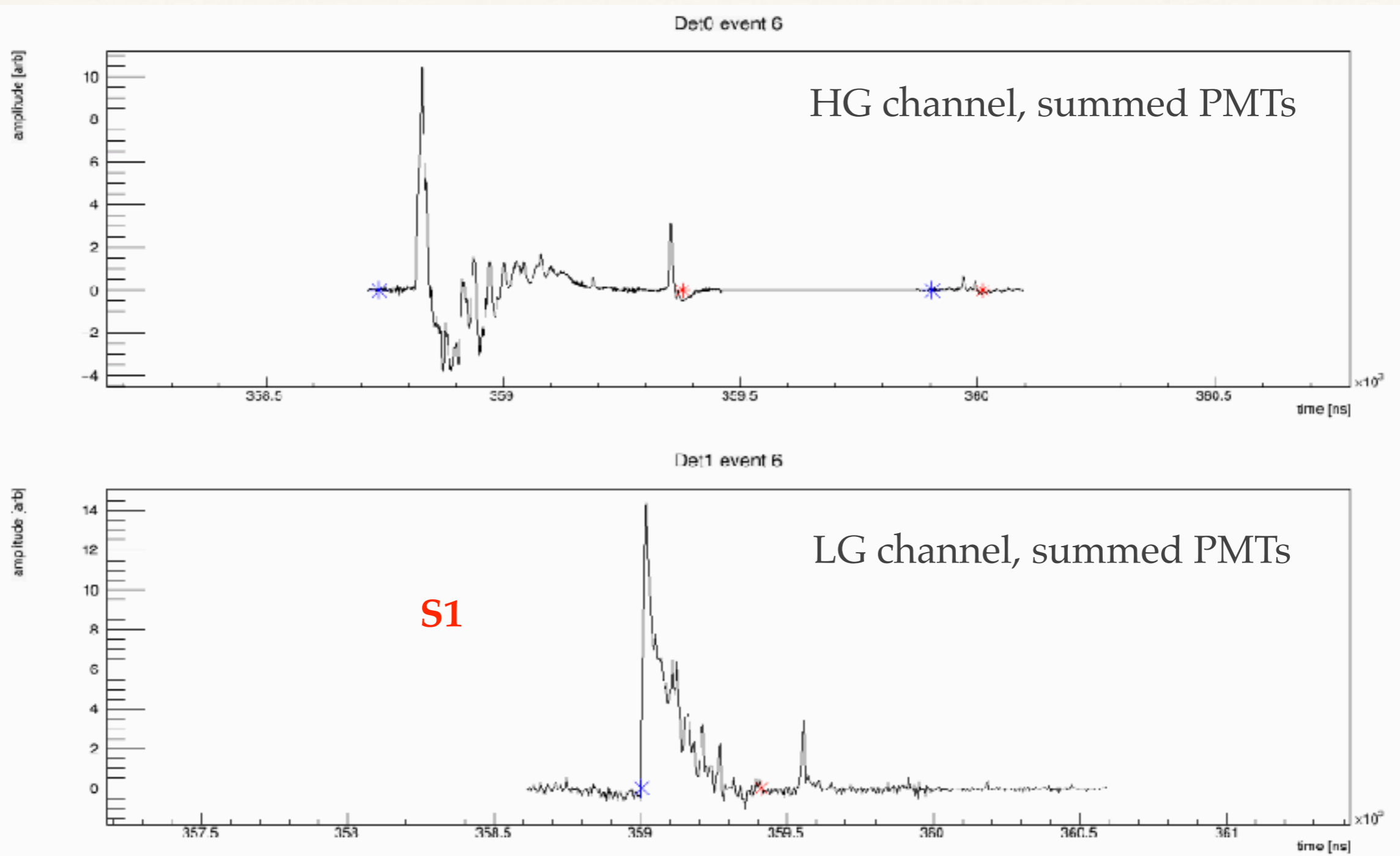# Phase II and grids

Rachel Mannino
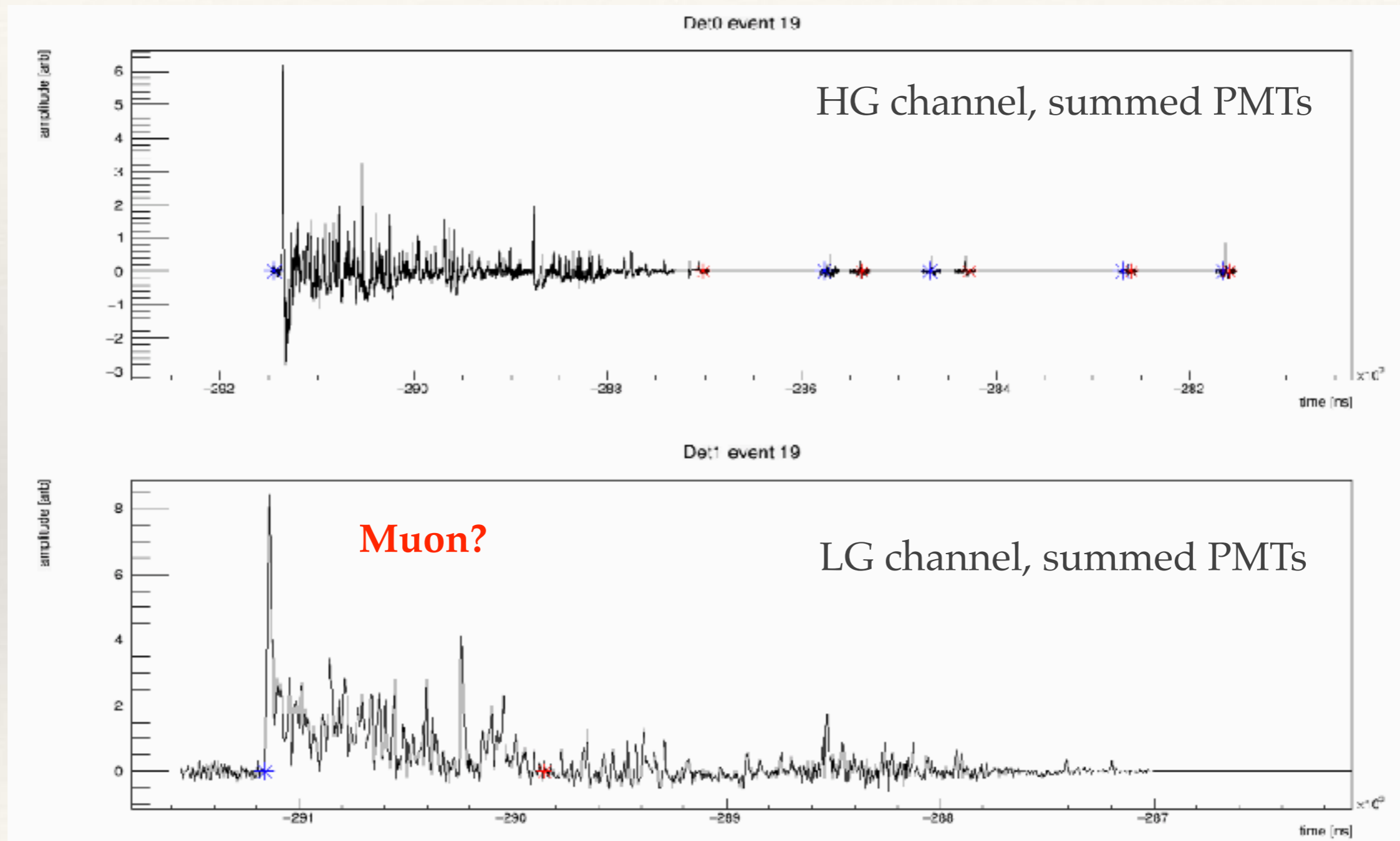22 May 2018

Phase II

- ❖ Vessel has high pressure (3.26 bar) Xe
- ❖ Testing electric fields between the cathode ring to hoop (1 cm gap)
- ❖ Calibration of PMT thresholds is pretty good, but could be optimized a bit further
  - ❖ Too aggressive on 2-3 PMTs
  - ❖ Too much noise on a few more
- ❖ Preliminary data taken (see table)
- ❖ Data converted into ROOT format and transferred to PDSF
- ❖ I need to work on running LZAP!

Ring voltage	Hoop voltage	#files
0	0	2
-8	0	2
-16	0	4
-8	0	2
-8	8	3

Phase II: C = -8 kV, Hoop = 0 V

Phase II: C = -8 kV, Hoop = 0 V

4 μs width

4

Next steps

❖ Look through data taken

❖ Modify the thresholds

❖ Take data where we ramp up in steps to see emission turn on

  ❖ C = ramps from 0 to -16 kV in 2 kV steps

  ❖ Hoop = 6 kV for 22 kV delta V at max.