

# ***Data Taking Status***

ProtoDUNE-SP DAP Meeting  
October 25th, 2018

## *Data collected so far*

<b>Energy</b>	<b>Total Triggers</b>	<b>Expected Pi trig.</b>	<b>Expected Proton trig.</b>	<b>Expected Electr. trig.</b>	<b>Expected Kaon trig.</b>
<b>1 GeV</b>	671K	301K	332K	35K	0
<b>2 GeV</b>	555K	333K	128K	0	5K
<b>7 GeV</b>	461K (532K)	289K (333K)	49K (56K)	95K (109K)	23K (27K)

- Total triggers are the beam triggers accepted by the DAQ
- Numbers between parenthesis @ 7 GeV obtained adding the last two runs taken @ 130 kV
- Number of triggers for each particle species estimated in two ways: using the Geant4 simulation of the beam, and the Cherenkov settings table produced by Paola, which also reports the beam content for each energy. When they disagree in the fraction of a given species, I pick the lowest value. This estimate does not take into account inefficiencies (like empty events)

# Current Run plan for last beam period (10/31 – 11/11)

Novembre 2018

Lunedì	Martedì	Mercoledì	Giovedì	Venerdì	Sabato	Domenica
<b>Beam off</b>		<b>Beam off 8am - 6pm</b>  <b>6pm-midnight: 6 GeV all trigger</b>	<b>1</b>  <b>6 GeV all trigger</b>	<b>2</b>  <b>6 GeV all trigger</b>	<b>3</b> <b>3 GeV</b> <b>Pi and proton veto on electron</b>	<b>4</b> <b>3 GeV</b> <b>Pi and proton veto on electron</b>
<b>5</b> <b>3 GeV</b> <b>Pi and proton veto on electron</b>	<b>6</b> <b>3 GeV</b> <b>Pi and proton veto on electron</b>	<b>7</b> <b>Beam off 8am - 6pm</b>  <b>6pm-midnight: All triggers 1 GeV</b>	<b>8</b>  <b>All triggers 1 GeV</b>	<b>9</b>  <b>All triggers 1 GeV</b>	<b>10</b> <b>Electron only trigger 2 GeV</b>	<b>11</b> <b>Electron only trigger 2 GeV</b> <b>last hours: 0.5 GeV</b>
<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>

- 6 GeV run can be stop earlier, once >300K pion triggers are reached (maybe 3 GeV run as well)
- Plan to be modified if necessary according to feedbacks received by people looking at the data collected so far

## ***During this beam off week (10/24 – 10/31)***

- Keep HV off at times to see whether it affects the frequency of “streamers” - cathode high current draw events (after HV PS replacement last week, the “spike” situation greatly improved, while streamers still remains) → ongoing
- Implementation of an automatic system to lower SiPM bias and cathode voltage to cure “streamers” when they show up → TBD
- CE pulser calibration runs → done
- PD bias voltage scan runs → done (maybe more needed)
- PD tests with calibration modules → ongoing
- Test CRT with multiple event builders → ongoing
- Tune CRT upstream-downstream trigger coincidence → TBD
- Install noise filters for cameras → TBD
- CE noise test shorting building and detector grounds → TBD if time allows (otherwise waiting for Linda and Terri to come on December