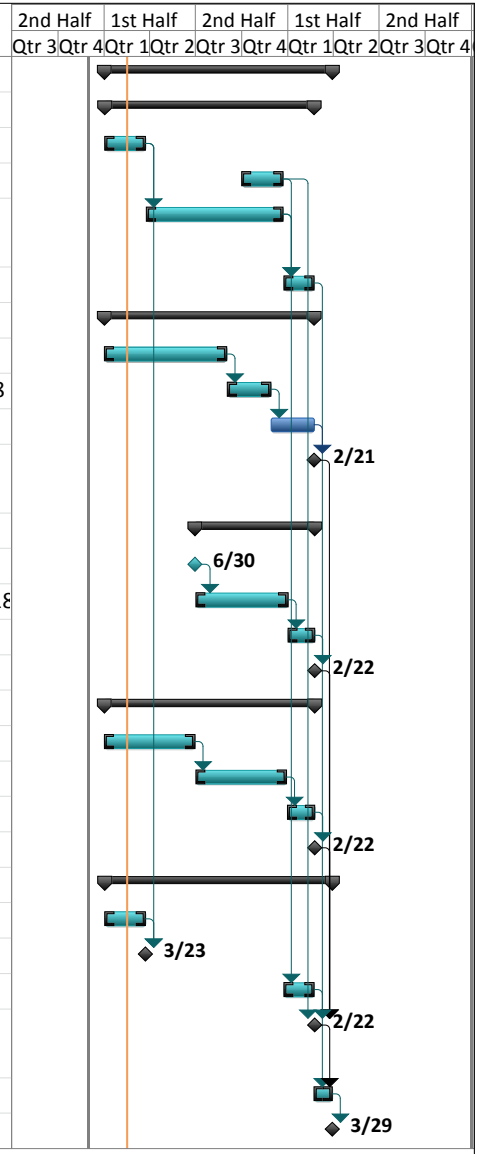
ID	WBS	Task Name	Duration	Start	Finish
205	**9**	**Single Phase Photon Detector**	**325 days**	**Mon 1/1/18**	**Fri 3/29/19**
206	**9.1**	**Physics/Simulation**	**298 days**	**Tue 1/2/18**	**Thu 2/21/19**
207	9.1.1	Preliminary assessment of Physics requirements for Photon Detection system	59 days	Tue 1/2/18	Fri 3/23/18
208	9.1.2	Quantify performance of PD Options in ProtoDUNE	60 days	Mon 10/1/18	Fri 12/21/18
209	9.1.3	Run simulations studies to better quantify physics requirements for Photon Detection	195 days	Mon 3/26/18	Fri 12/21/18
210	9.1.4	Quantify performance of DUNE PD options with respect to physics requirements	44 days	Mon 12/24/18	Thu 2/21/19
211	**9.2**	**Light Collectors**	**299 days**	**Mon 1/1/18**	**Thu 2/21/19**
212	9.2.1	Development of next generation ARAPUCA technology	175 days	Mon 1/1/18	Fri 8/31/18
213	9.2.2	Testing of next generation ARAPUCA design	62 days	Mon 9/3/18	Tue 11/27/18
214	9.2.3	Analysis of next generation ARAPUCA test data	62 days	Wed 11/28/18	Thu 2/21/19
215	9.2.4	Results of performance studies of advanced prototype testing and technology comparison	0 days	Thu 2/21/19	Thu 2/21/19
216	**9.3**	**Photosensors**	**170 days**	**Sat 6/30/18**	**Fri 2/22/19**
217	9.3.1	Sample-lots of candidate photosensors in hand, along with testing facilities	0 days	Sat 6/30/18	Sat 6/30/18
218	9.3.2	Testing of candidate photosensors and photosensor ganging	131 days	Mon 7/2/18	Mon 12/31/18
219	9.3.3	Analysis of photosensor test data	39 days	Tue 1/1/19	Fri 2/22/19
220	9.3.4	Results of evaluation and availability of integrated photosensor-electronics	0 days	Fri 2/22/19	Fri 2/22/19
221	**9.4**	**Electronics/Cabling**	**300 days**	**Mon 1/1/18**	**Fri 2/22/19**
222	9.4.1	Development of optimized electronics readout and cabling design	130 days	Mon 1/1/18	Fri 6/29/18
223	9.4.2	Prototyping and testing of optimized electronics readout and cabling	130 days	Mon 7/2/18	Fri 12/28/18
224	9.4.3	Analysis of optimized electronics test data	40 days	Mon 12/31/18	Fri 2/22/19
225	9.4.4	Results of evaluation of optimized electronics	0 days	Fri 2/22/19	Fri 2/22/19
226	**9.5**	**TP/TDR**	**324 days**	**Tue 1/2/18**	**Fri 3/29/19**
227	9.5.1	Establish preliminary criteria for PD technology down-select (included in TP)	59 days	Tue 1/2/18	Fri 3/23/18
228	9.5.2	SP-Photon Detector Technical Proposal - Submit for Internal Review	0 days	Fri 3/23/18	Fri 3/23/18
229	9.5.3	Establish final criteria for PD technology down-select	44 days	Mon 12/24/18	Thu 2/21/19
230	9.5.4	Down select to primary (and alternate if required) technologies for all Photon Detector components	0 days	Fri 2/22/19	Fri 2/22/19
231	9.5.5	Final editing of TDR	26 days	Fri 2/22/19	Fri 3/29/19
232	9.5.6	SP-Photon Detector TDR - Submit for Internal Review	0 days	Fri 3/29/19	Fri 3/29/19



Project: FD Int schedule
Date: Fri 2/16/18

Task	External Milestone	Manual Summary Rollup	
Split	Inactive Task	Manual Summary	
Milestone	Inactive Milestone	Start-only	
Summary	Inactive Summary	Finish-only	
Project Summary	Manual Task	Deadline	
External Tasks	Duration-only	Progress	