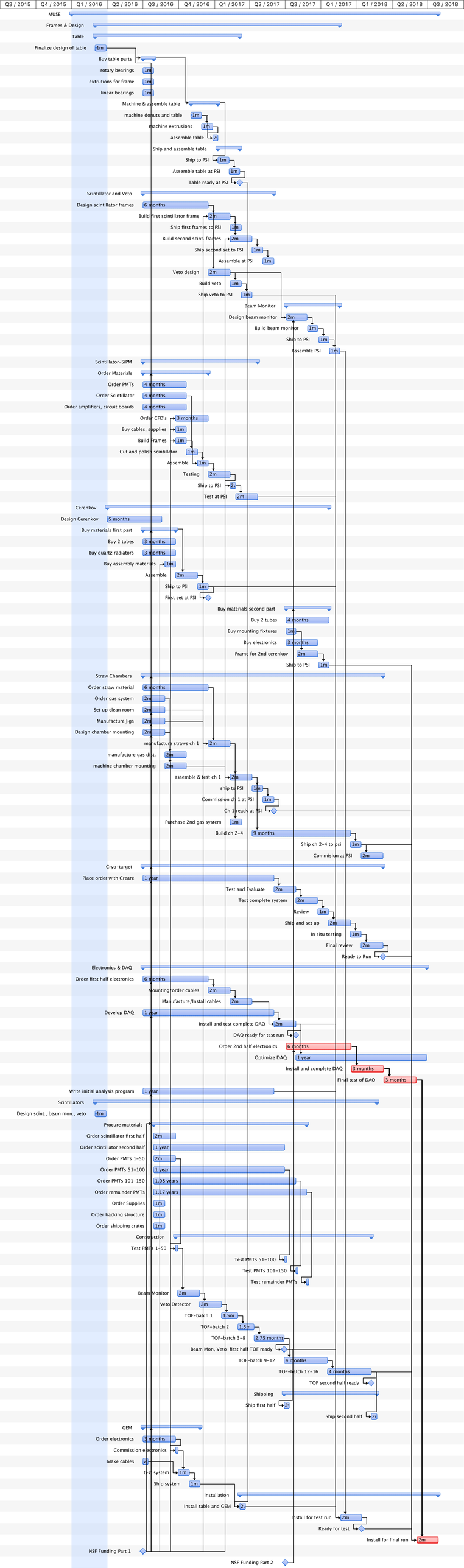
Q3 / 2015
Q4 / 2015
Q1 / 2016
Q2 / 2016
Q3 / 2016
Q4 / 2016
Q1 / 2017
Q2 / 2017
Q3 / 2017
Q4 / 2017
Q1 / 2018
Q2 / 2018
Q3 / 2018
MUSE
Frames & Design
Table
Finalize design of table
1m
Buy table parts
rotary bearings
1m
extrutions for frame
1m
linear bearings
1m
Machine & assemble table
machine donuts and table
1m
machine extrusions
1m
assemble table
2
Ship and assemble table
Ship to PSI
1m
Assemble table at PSI
1m
Table ready at PSI
Scintillator and Veto
Design scintillator frames
6 months
Build first scintillator frame
2m
Ship first frames to PSI
1m
Build second scint. frames
2m
Ship second set to PSI
1m
Assemble at PSI
1m
Veto design
2m
Build veto
1m
Ship veto to PSI
1m
Beam Monitor
Design beam monitor
2m
Build beam monitor
1m
Ship to PSI
1m
Assemble PSI
1m
Scintillator-SiPM
Order Materials
Order PMTs
4 months
Order Scintillator
4 months
Order amplifiers, circuit boards
4 months
Order CFD's
3 months
Buy cables, supplies
1m
Build Frames
1m
Cut and polish scintillator
1m
Assemble
1m
Testing
2m
Ship to PSI
2
Test at PSI
2m
Cerenkov
Design Cerenkov
5 months
Buy materials first part
Buy 2 tubes
3 months
Buy quartz radiators
3 months
Buy assembly materials
1m
Assemble
2m
Ship to PSI
1m
First set at PSI
Buy materials second part
Buy 2 tubes
4 months
Buy mounting fixtures
1m
Buy electronics
3 months
Frame for 2nd cerenkov
2m
Ship to PSI
1m
Straw Chambers
Order straw material
6 months
Order gas system
2m
Set up clean room
2m
Manufacture Jigs
2m
Design chamber mounting
2m
manufacture straws ch 1
2m
manufacture gas dist.
2m
machine chamber mounting
2m
assemble & test ch 1
2m
ship to PSI
1m
Commission ch 1 at PSI
1m
Ch 1 ready at PSI
Purchase 2nd gas system
1m
Build ch 2-4
9 months
Ship ch 2-4 to psi
1m
Commision at PSI
2m
Cryo-target
Place order with Creare
1 year
Test and Evaluate
2m
Test complete system
2m
Review
1m
Ship and set up
2m
In situ testing
1m
Final review
2m
Ready to Run
Electronics & DAQ
Order first half electronics
6 months
Mounting order cables
2m
Manufacture/Install cables
2m
Develop DAQ
1 year
Install and test complete DAQ
2m
DAQ ready for test run
Order 2nd half electronics
6 months
Optimize DAQ
1 year
Install and complete DAQ
3 months
Final test of DAQ
3 months
Write initial analysis program
1 year
Scintillators
Design scint., beam mon., veto
1m
Procure materials
Order scintillator first half
2m
Order scintillator second half
1 year
Order PMTs 1-50
2m
Order PMTs 51-100
1 year
Order PMTs 101-150
1.08 years
Order remainder PMTs
1.17 years
Order Supplies
1m
Order backing structure
1m
Order shipping crates
1m
Construction
Test PMTs 1-50
Test PMTs 51-100
Test PMTs 101-150
Test remainder PM's
Beam Monitor
2m
Veto Detector
2m
TOF-batch 1
1.5m
TOF-batch 2
1.5m
TOF-batch 3-8
2.75 months
Beam Mon, Veto first half TOF ready
TOF-batch 9-12
4 months
TOF-batch 12-16
4 months
TOF second half ready
Shipping
Ship first half
2
Ship second half
2
GEM
Order electronics
3 months
Commission electronics
Make cables
2
test system
1m
Ship system
1m
Installation
Install table and GEM
2
Install for test run
2m
Ready for test
Install for final run
2m
NSF Funding Part 1
NSF Funding Part 2