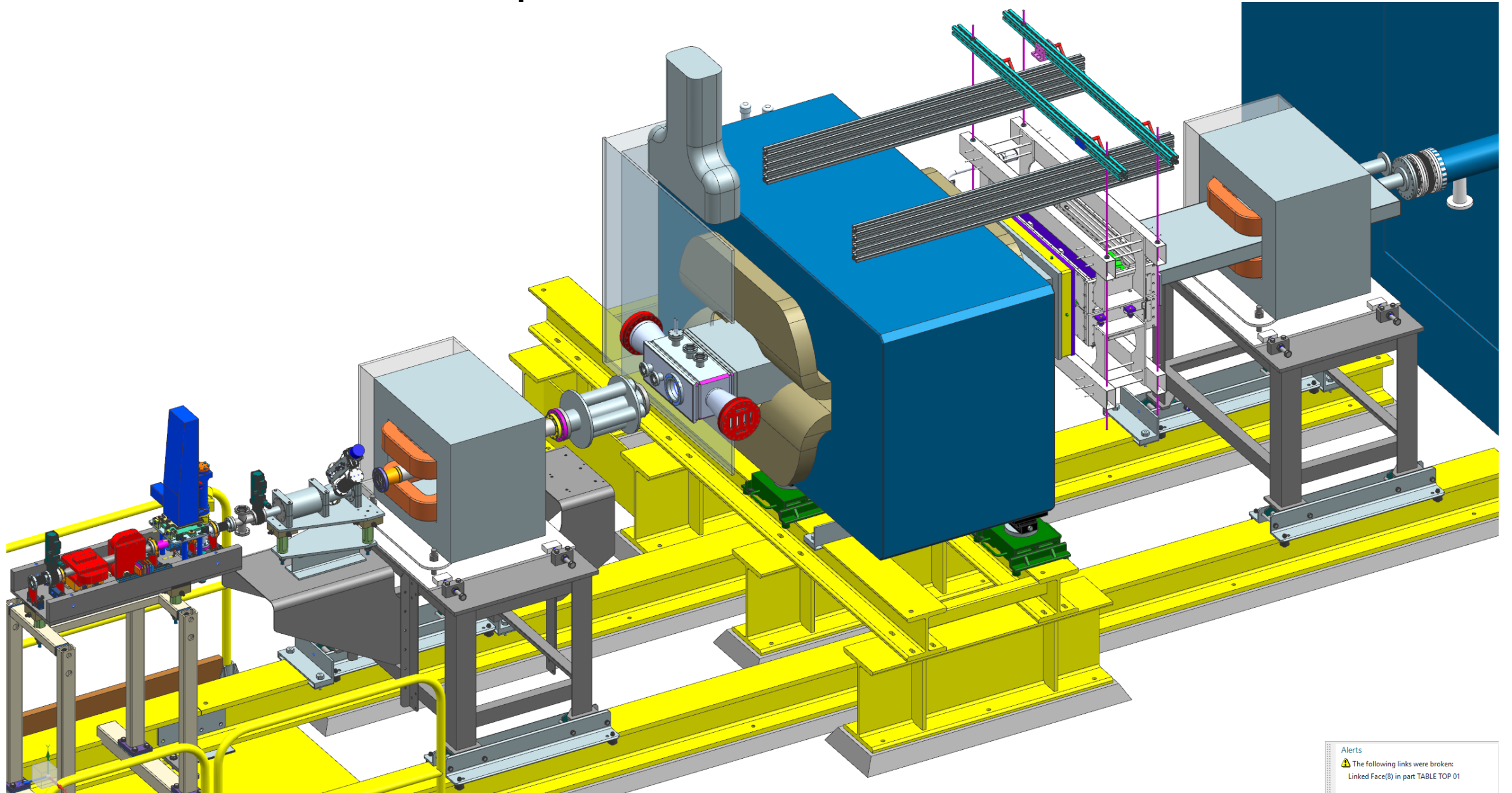


HPS installation, preliminary

HPS 2019 Setup



Alerts
⚠ The following links were broken:
Linked Face(8) in part TABLE TOP 01

CLAS12-HPS transition

- ❑ Remove beamline elements from the space frame, disconnect and remove CLAS12 cryo target, move the target to EEL: 4/16 – 4/19
- ❑ Remove shielding on the tagger, remove the collimator box, replace beam pipe through the tagger magnet yoke: 4/16 – 4/26
- ❑ Restore shielding and reinstall collimator box: 4/29 – 5/3
- ❑ Restore beamline on the space frame: 4/29 – 5/3
- ❑ Move solenoid upstream and install beam pipe through torus bore: 4/29 – 5/3
- ❑ Start pump down vacuum in upstream beam line (including tagger magnet vacuum chamber): 5/3
- ❑ Install He-bag and beam viewer on tagger dump: 5/6 – 5/10
- ❑ Restore downstream chicane magnet and the vacuum chamber: 4/22 – 4/26
- ❑ Move HPS analyzing magnet to its nominal position: 4/22 – 4/26
- ❑ Move Ecal towards the magnet, connect to the electronics, install the hodoscope PMTs and start cosmic calibrations: 4/29
- ❑ Restore HPS halo counters: 5/1 – 5/3

HPS work (add ~2 days to the schedule)

★	Downstream task	40 hrs	Mon 4/15/19	Fri 4/19/19		
☞	Bleed up downstream beamline	1 hr	Mon 4/15/19	Mon 4/15/19	10	David
☞	Remove downstream beampipe (MARK FOR REASSEMBLY)	2 hrs	Tue 4/16/19	Tue 4/16/19	66	David,Morgan
☞	Disconnect and move HPS chillers	1.5 hrs	Tue 4/16/19	Tue 4/16/19	67	David
☞	remove DS frascatti flange	1 hr	Tue 4/16/19	Tue 4/16/19	68	David,Morgan
☞	instal new DS flange on frascatti vacuum box	1 hr	Tue 4/16/19	Tue 4/16/19	69	David,Morgan
☞	Replace DS oil vane pumps with scrolls	2 hrs	Tue 4/16/19	Tue 4/16/19	70	David,Morgan
☞	Mount DS frascatti on table	1 hr	Tue 4/16/19	Wed 4/17/19	71	David,Morgan
☞	cabl and connect hoses to DS Frascatti	2 hrs	Wed 4/17/19	Wed 4/17/19	72	David,Krister,Morgan
☞	move HPS calorimeter on rails as needed to move PairSpec magnet	1 hr	Wed 4/17/19	Wed 4/17/19	62	David,Morgan
☞	move pair spec magnet to beamline position	4 hrs	Wed 4/17/19	Wed 4/17/19	63	David,Denny,Morgan
☞	move ecal over DS frascatti vacuum box	1 hr	Wed 4/17/19	Thu 4/18/19	64	Morgan,David
☞	install and level I-beams on platform	3 hrs	Thu 4/18/19	Thu 4/18/19	65	David,Morgan
☞	Align PairSpec and DS Frascatti , measure height of I-beams on platform	8 hrs?	Thu 4/18/19	Fri 4/19/19	73	survey
☞	install beam tube from HTCC to forward carriage apex (must be done before scheduled to connect to upstream beam tube)	2 hrs	Thu 4/18/19	Thu 4/18/19	73	David,Morgan
☞	Modify 2H02 girder legs based on height from I-beams	8 hrs?	Fri 4/19/19	Mon 4/22/19	74	Cyril,David,Morgan
☞	Test PairSpec to full field	3 hrs	Thu 4/18/19	Fri 4/19/19	75	Krister
☞	install power to HPS chillers	8 hrs?	Mon 4/15/19	Tue 4/16/19	10	facilities
☞	Install HPS chillers	2 hrs	Tue 4/16/19	Wed 4/17/19	78	David,Morgan
☞	Install downstream HPS SVT and hodoscope	5 hrs	Tue 5/7/19	Tue 5/7/19		David,HPS,Morgan
☞	install upstream HPS SVT	8 hrs?	Tue 5/7/19	Wed 5/8/19	80	David,HPS,Morgan
☞	Align HPS components	8 hrs?	Wed 5/8/19	Thu 5/9/19	81	survey
☞	install US Frascatti	2 hrs	Thu 5/9/19	Thu 5/9/19	82	David,Morgan
☞	cabl and connect hoses to US Frascatti	2 hrs	Thu 5/9/19	Fri 5/10/19	83	David,Morgan
☞	test Frascatti US and DS to full field	4 hrs	Fri 5/10/19	Fri 5/10/19	84	Krister
☞	install 2H03 and 2H02 girders	4 hrs	Fri 5/10/19	Mon 5/13/19	85	David,Morgan
☞	install beam tube from HPS SVT to 2H03 girder	1 hr	Mon 5/13/19	Mon 5/13/19	86	David,Morgan
☞	install bellows between 2H02 and 2H03 girders (beam line components set the Z location of girders)	1 hr	Mon 5/13/19	Mon 5/13/19	87	David,Morgan
☞	measure beam tube from FC apex to 2H02	1 hr	Mon 5/13/19	Mon 5/13/19	88	David,Morgan
☞	fabricate beam tube from FC apex to 2H02	8 hrs?	Mon 5/13/19	Tue 5/14/19	89	Calvin,David
☞	install beam tube from FC apex to 2H02	1 hr	Tue 5/14/19	Tue 5/14/19	90	David,Morgan



HPS detector installation

- ❑ Open the vacuum chamber, install and survey SVT L6: 5/06 – 5/10
- ❑ Install and survey the hodoscope and the Ecal vacuum chamber: 5/9 – 05/10
- ❑ Install and survey SVT L0-3 and the target: 5/06 – 5/10
- ❑ Connect and tests SVT the cooling, and the SVT and target motion systems, close the vacuum chamber: 5/9 – 5/10
- ❑ Install and connect upstream Frascati dipole: 5/13 – 5/14
- ❑ Test magnets: 5/14
- ❑ Install 2H02A harp, cleanup collimator, 2H02 girder with HPS collimator, and connect to vacuum chamber: 5/13 – 5/15
- ❑ Test the vacuum downstream of the 2H02 girder: 5/15 – 5/17
- ❑ Install beam pipes from forward carriage to the alcove: 5/20
- ❑ Move Ecal to the running position and survey the “*world*”: 5/20 – 5/22

Ready!