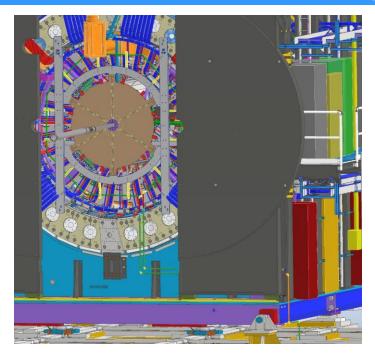
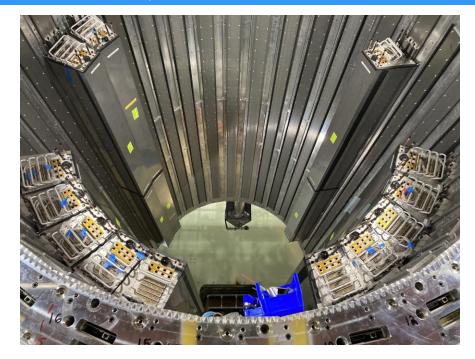


# sPHENIX Construction Update

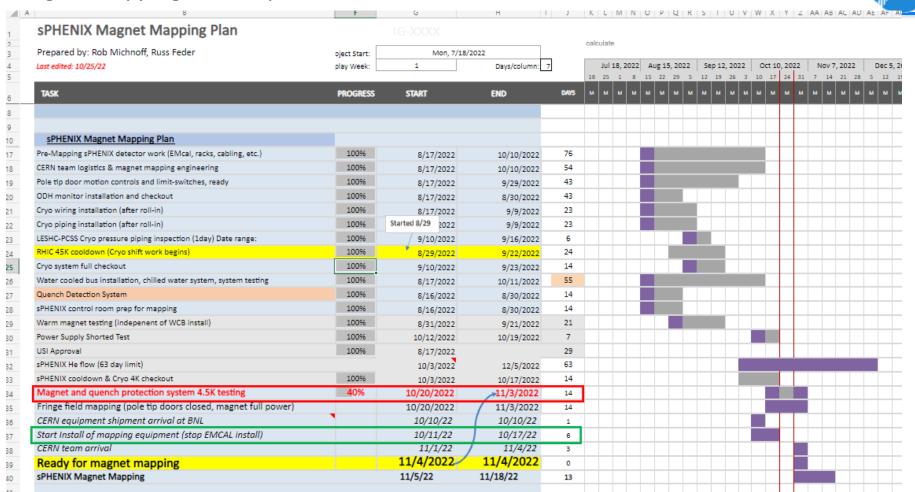
Russell Feder for the sPHENIX team sPHENIX PMG, October 27th, 2022





### Magnet Mapping Roadmap

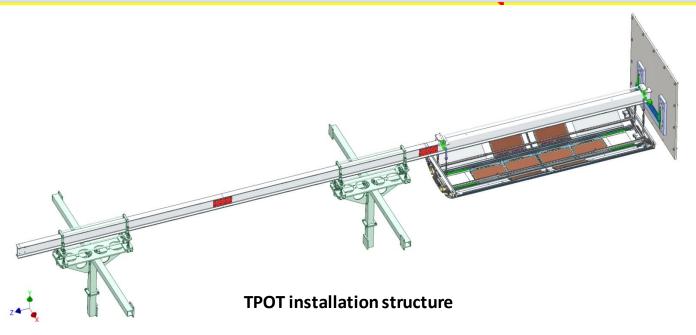




## Next Steps



Magnet mapping complete	11/11/22	11/24/22
EMCAL sectors install completion	11/25/22	12/5/22
Circumferential Cable Tray, iHCAL Cabling	11/25/22	12/5/22
EMCAL face support frames, EMCAL cooling blocks supports, and TPOT complete installation (north)	12/6/22	12/16/22
Continue with oHCAL and iHCAL service work on alternate shifts	12/6/22	12/16/22
EMCAL and TPOT services south (start after TPOT install structure removed)	12/17/22	1/1/23



## sPHENIX construction schedule after magnet mapping



Sequential Build Steps	Start	End	N-22	D-22	J-23	F-23	M-23 A-23		
Magnet Mapping		11/24/22					Continue oHCAL, iHCAL, EMCAL, TPOT, TPC servicing		
Complete EMCAL sector installation	11/25/22	12/5/22					and testing on alternate shifts and overtime		
iHCAL cabling, oHCAL cabling completion	11/25/22	12/5/22	-						
TPOT, EMCAL-face support frames, TPOT services N&S	12/6/22	1/23/23							
EMCAL services north and south	12/10/22	1/23/22				i			
TPC installation, TPC services north and south	1/8/23	2/19/23							
INTT support structure, beam pipe, beam pipe bake	2/20/23	3/10/23							
INTT installation, INTT services north and south	3/17/23	4/5/23			Vinte				
MVTX installation, MVTX services south	3/29/23	4/10/23			holic				
MBD, MBD services north and south	4/6/23	4/17/23/23			ays				
sEPD, sEPD services north and south, VESDA tubing	4/12/23	4/24/23							
Racks and On-carriage AC power	Current	1/20/23	1 1				Infrastructure work on primary shifts and overtime		
Water infrastructure: ECW and chilled water systems	Current	2/17/23			i i i				
Gas systems	Current	3/17/23	1 1			1 1 1			
E-stops, VESDA system, safety systems	Current	4/24/23							
						1 1 1			

### **Next Steps**



#### Magnet testing

- 1. 24-hour full field test running since 5 PM 10/26
- 2. Higher level of safety controls implemented
  - 1. The 1008 IR is now under ODH-0, static magnetic field, and various LOTO applications
  - 2. We are getting timely support from ES&H personnel
  - 3. SPHENIX technicians complete LOTO training to be ready to work on magnet mapping
  - 4. Additional LOTO training classes are being organized for everyone else

#### 2. Magnet mapping

- 1. The CERN team lands 10/30 at JFK. They are fully registered and have BNL LIFE numbers, and assigned training JTAs.
- 2. We are working with them to try to complete training ASAP so they can work on sPHENIX
- 3. sPHENIX techs are working on installing the mapper rails and the mapper robot. Need the pole tip doors re-opened to continue with this work. The air compressor system is ready.

#### 3. EMCAL sector installation

- 1. There are 13 more rows of EMCAL sectors to install
- 2. This will resume after magnet mapping

#### 4. IHCAL cabling

- 1. Will start on the <u>south end</u> when magnet mapping is complete
- 2. HCAL personnel are taking LOTO and other training to be ready to work

#### 5. TPOT installation

- 1. Will start on the <u>north end</u> when magnet mapping is complete
- 2. Uses TPC installation structures plus additional TPOT-specific installation equipment
- 3. All of the TPC provided parts are in the SBU shop and near completion
- 4. Working closely with TPOT team to get all the TPOT furnished parts to BNL in time for installation early to mid-December