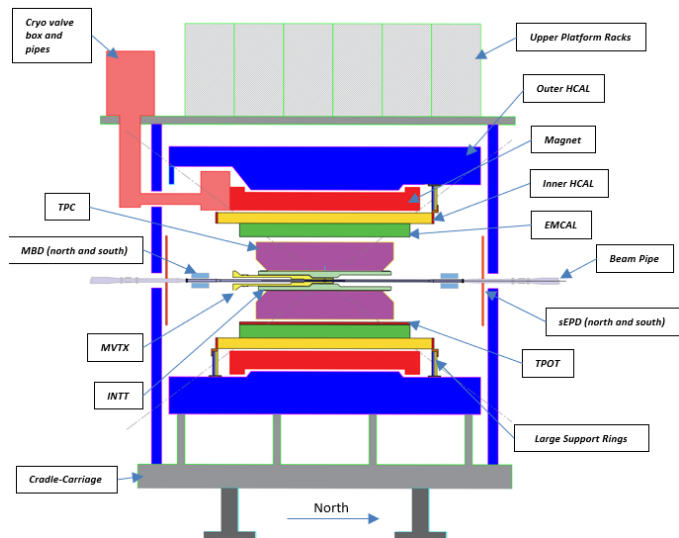


# sPHENIX PMG

## Construction Update, 4/20/2022



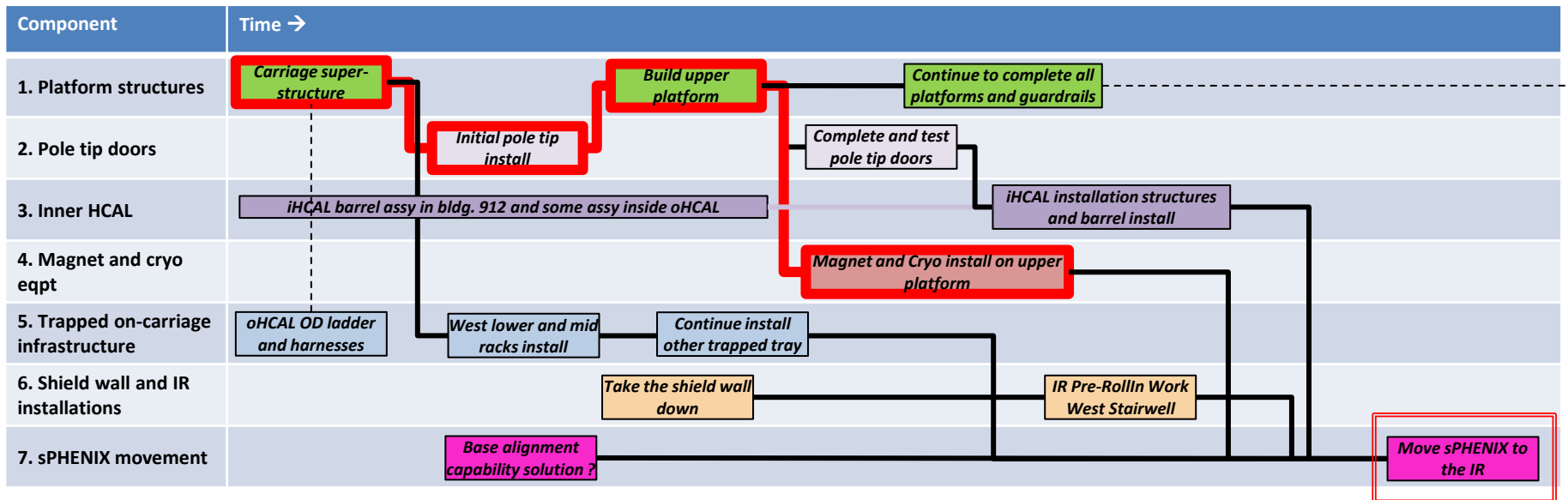
This is a simplified 2D model of sPHENIX highlighting the nested detector structures and magnet return steel construction.



# What is needed to roll sPHENIX into the IR?

**There are six prerequisites for moving sPHENIX to the IR once the shield wall comes out:**

1. Complete enough of the platforms to install cryo equipment on the upper platform and to install and test the pole tip doors
2. Install the magnet extension valve box and the large distribution valve box in the SW corner of the upper platform
3. Install and test the motion of the pole tip doors
4. Complete the mechanical installation of the iHCAL barrel
5. Install all trapped on-carriage infrastructure; cable tray, racks
6. Install pre-roll-in infrastructure in the IR (can't be installed safely or easily once sPHENIX is rolled in)



## Platforms

- Platform installation is progressing on schedule and will be ready for magnet cryo equipment, as scheduled, starting 6/14



## Magnet cryo infrastructure

- The support structure for the magnet cryo-services extension is in place



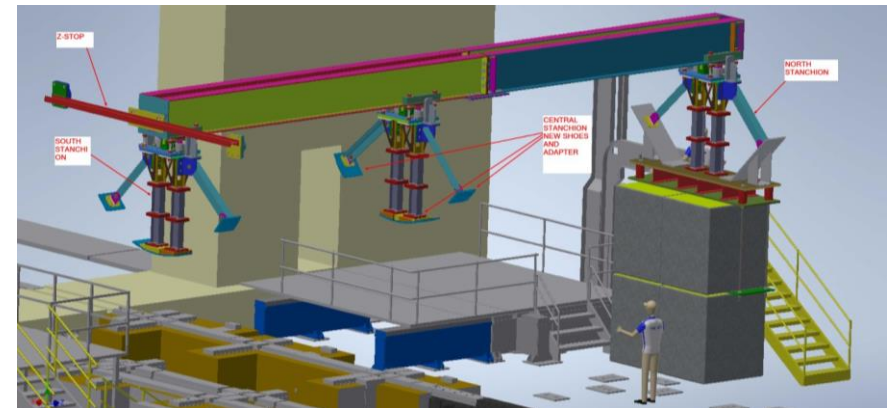
## Pole Tip Doors

- The pole tip doors and the sPHENIX structure are being prepared for installation starting week of June 6<sup>th</sup>, if not sooner...



## Inner HCAL Installation

- Inner HCAL installation will start 5/19/22
- The first step is to install the south slider beam inside the cryostat



## On-Carriage Infrastructure

- West L1 and L2 racks have been installed, working on East side
- Cable tray and oHCAL cabling also underway



## EMCAL

- EMCAL installation can start earlier than expected, in the AH. Will also be done in the IR.
- Start in mid-June when iHCAL is installed and some other work in the AH has cleared out



- On track to move sPHENIX to the IR on or about 8/8/22
- Install of the magnet valve extension and other cryo work will start 6/14 as planned
- We have flipped the order of installation of the pole tip doors and iHCAL
  - iHCAL: 5/23 to 6/17
  - Pole tip doors: 6/6 to 7/1
- Other progress
  - The STAR small-bore Al-Be beam pipe was harvested, is in very good condition, and is in storage with the CA-D vacuum group