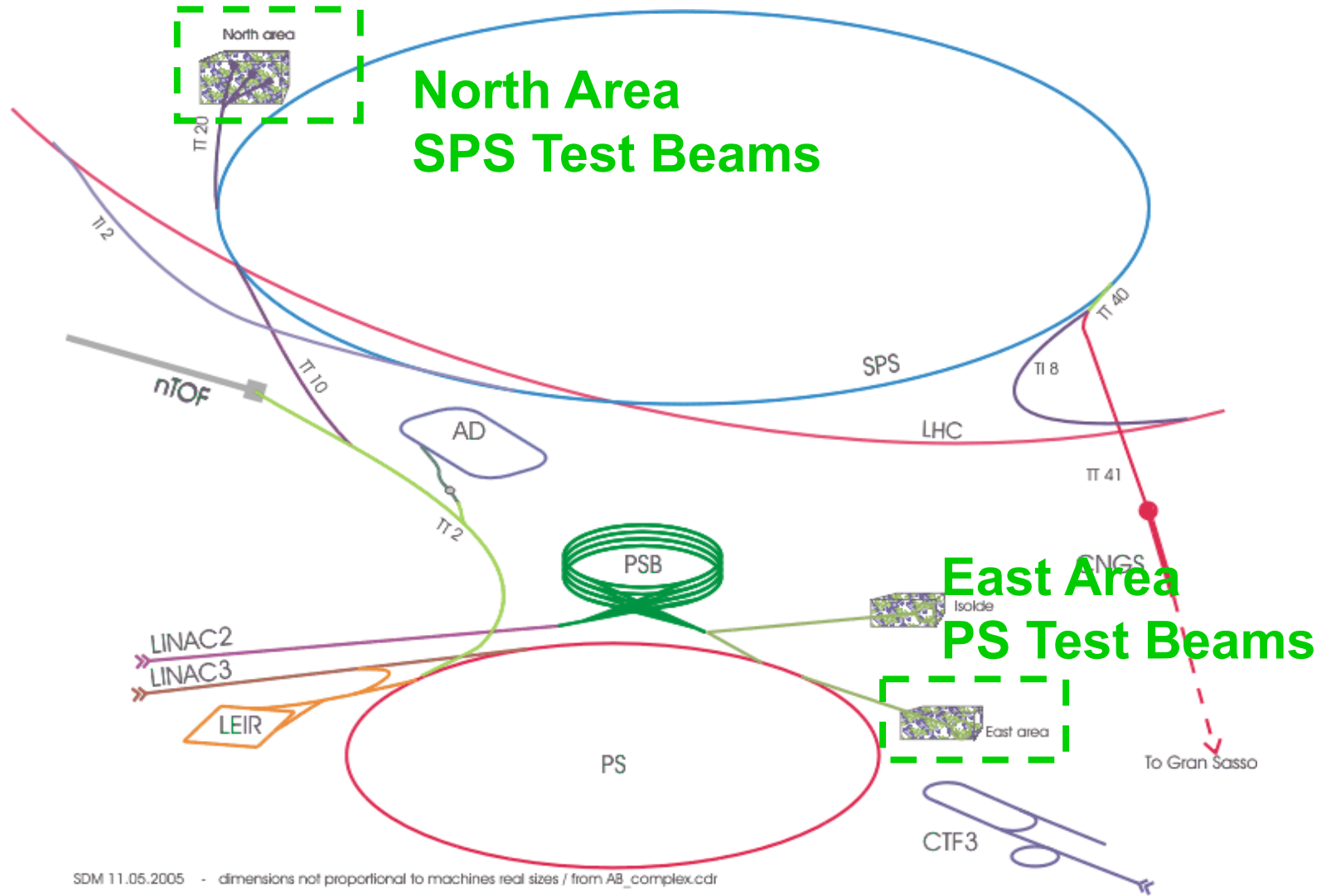


# CERN Test Beam Update and Schedule

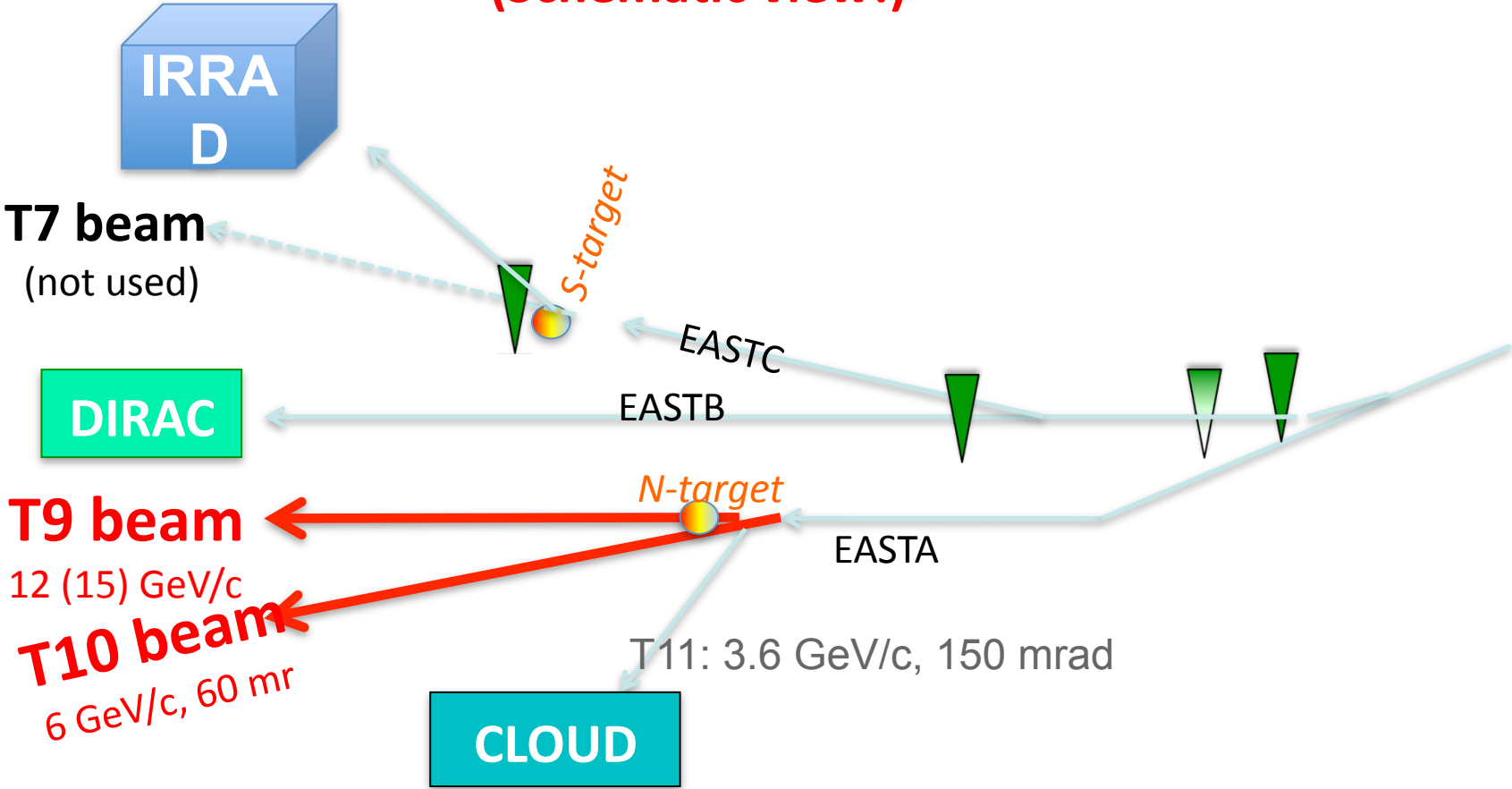
- 2011 Users at PS Testbeams : ~ 20 Groups
- 2011 Users at SPS Testbeams : ~ 50 Groups
- 2011 Users at Irradiation Facility : ~ 15 Groups

# Beam Facilities at CERN



# The East Area Beams

(Schematic view!)





Horst Breuker ALCPG11 22-03-11

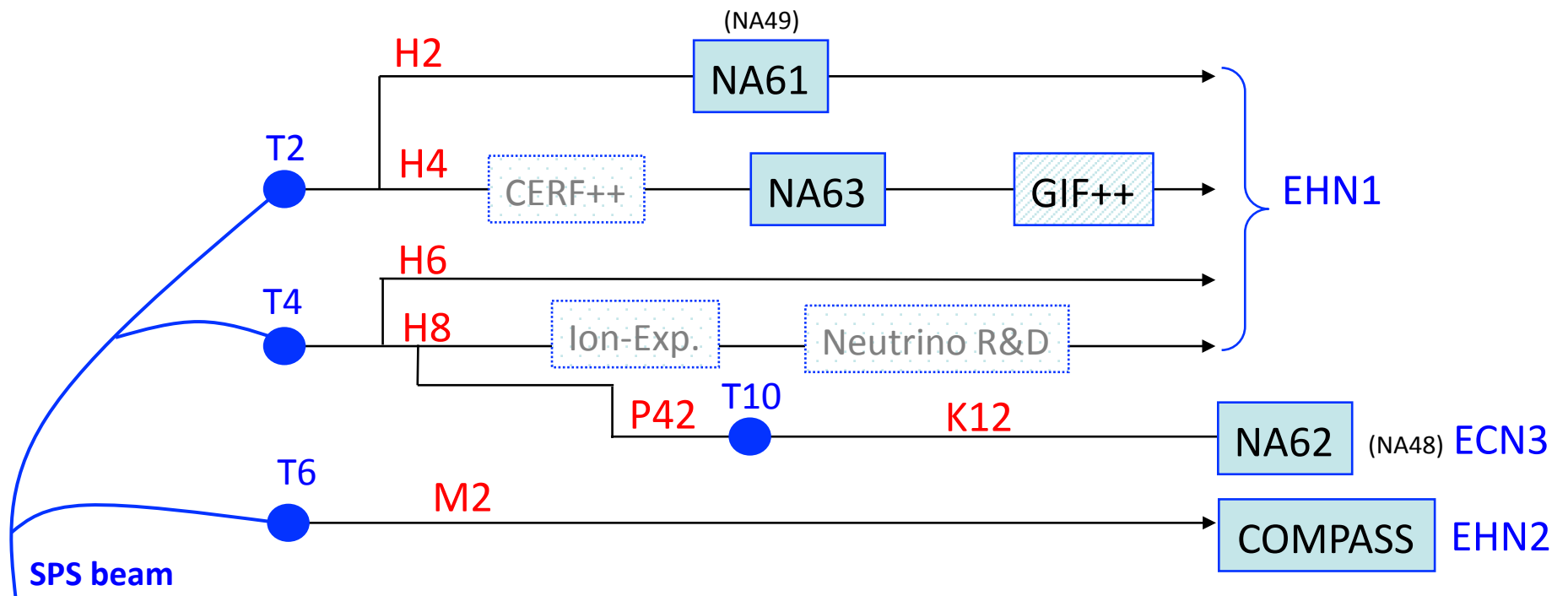
Line	Momentum range	Momentum resolution	Particles	Nominal Intensity (*)	Intensity range (relative)	Remarks
T7	<b>1-10 GeV/c (<math>\pm</math>)</b>	0.4%	mixed	$0.3-1.0 \cdot 10^6$	$\sim 1.0 \cdot 10^{-3}-5$	not used in 2011
T8	<b>24 GeV/c</b>	0.015%	protons	$5-20 \cdot 10^{10}$	from MCR	primary
T9	<b>1-15 GeV/c (<math>\pm</math>)</b>	0.6%	mixed	$0.3-1.0 \cdot 10^6$	$\sim 0.02-6$	
T10	<b>1-7 GeV/c (<math>\pm</math>)</b>	0.5%	mixed	$0.3-1.0 \cdot 10^6$	$\sim 0.02-4$	
T11	<b>1-3.6 GeV/c (<math>\pm</math>)</b>	$\sim 1\%$	mixed	$0.3-1.0 \cdot 10^6$	$\sim 0.02-5$	
Irrad1	<b>24 GeV/c</b>	0.015%	proton	$8-30 \cdot 10^{10}$	from MCR	primary
Irrad2	<b>several MeV</b>	unselected	neutrons			depends on T8

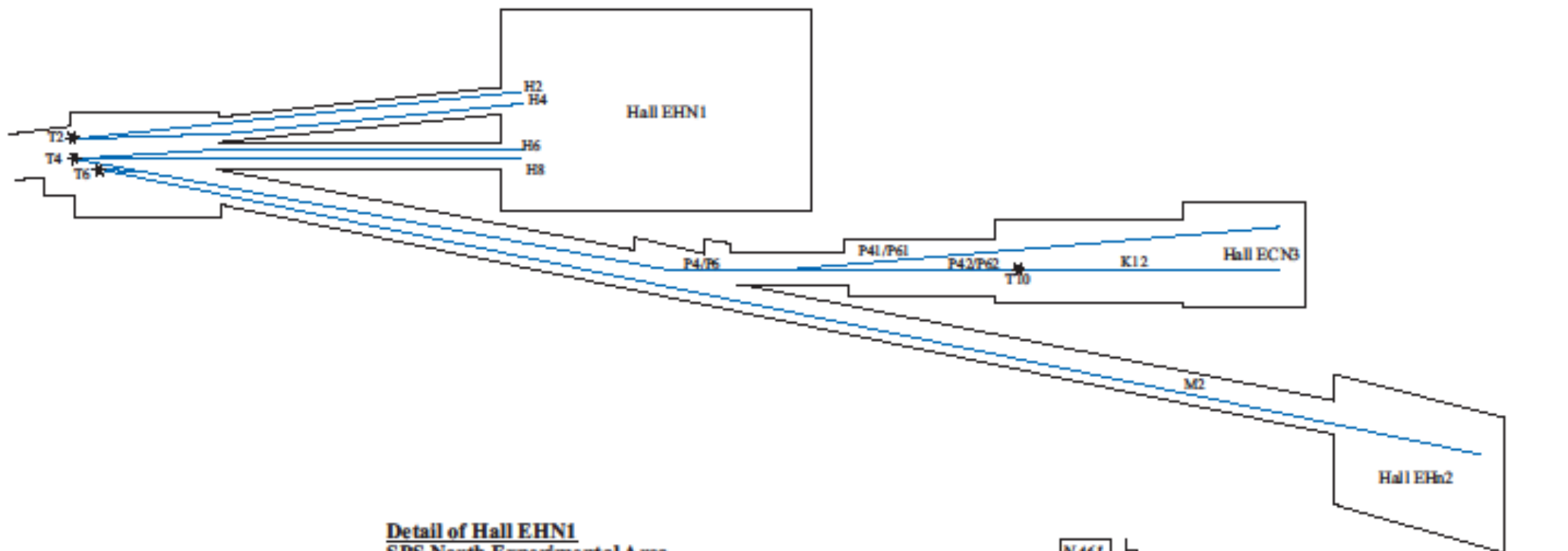
\*) Intensity is for 1% momentum bite, nominal target and  $2 \cdot 10^{11}$  ppp on target and intensity collimator(s) wide opened.

- Spill 400 ms (could be  $> 500$  ms at 20 GeV/c)
- Some more intensity control exists for the primary beam (0.5-1.0) and via the target efficiency ( $\sim 0.02-1.0$ ).

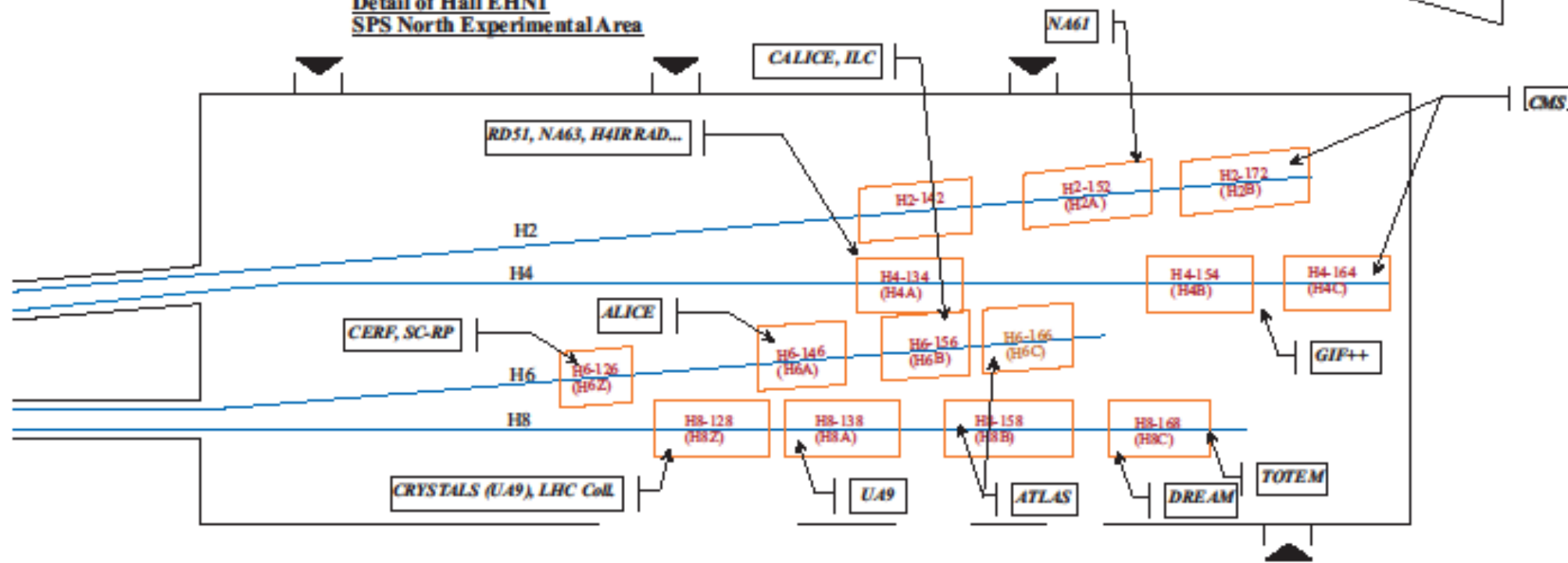
# The North Experimental Areas at the SPS

- The SPS proton beam (400 GeV/c) slowly extracted to North Area
- Directed towards the three North Area primary targets **T2**, **T4** and **T6**





**Detail of Hall EHN1  
SPS North Experimental Area**



## Performance of the EHN1 beams

Beam Line	$p_{\max}$ (GeV/c)	Intensity/pulse for $10^{12}$ ppp incident	Beam type
H2	400	$9 \cdot 10^7 \pi^+$ at 200 GeV/c $3 \cdot 10^7 \pi^-$ at 200 GeV/c $4 \cdot 10^6 e^\pm$ at 150 GeV/c $1 \cdot 10^5 \text{Pb}$ at 400 GeV/Z	High-energy hadron or electron beam for physics or tests *)  Heavy ion beam
H4	400	$9 \cdot 10^7 \pi^+$ at 200 GeV/c $3 \cdot 10^7 \pi^-$ at 200 GeV/c $4 \cdot 10^6 e^\pm$ at 150 GeV/c $> 10^7 p$ at 400 GeV/c $1 \cdot 10^5 \text{Pb}$ at 400 GeV/Z	High-energy hadron or electron beam for physics or tests,  Att. proton beam  Heavy ion beam
H6	200	$1 \cdot 10^8 \pi^+$ at 150 GeV/c $4 \cdot 10^7 \pi^-$ at 150 GeV/c	Medium energy hadron beam, also for tertiary test beams
H8	400	$1 \cdot 10^7 p$ at 400 GeV/c $2 \cdot 10^8 \pi^+$ at 200 GeV/c $7 \cdot 10^7 \pi^-$ at 200 GeV/c $1 \cdot 10^5 \text{Pb}$ at 400 GeV/Z	Att. proton beam  High-energy hadron or electron beam for physics or tests, *)  Heavy ion beam



# Unofficial Schedule

- Beams are available :
- **2011** : begin May to mid November
- **2012** : begin May to mid November
- **2013** : no beams at all at CERN
- **2014** : maybe PS beams restart
- **2015** : begin May to mid November