



***WLCG Collaboration Workshop,***

***“Gotham City”, May 2012***

***Introduction***

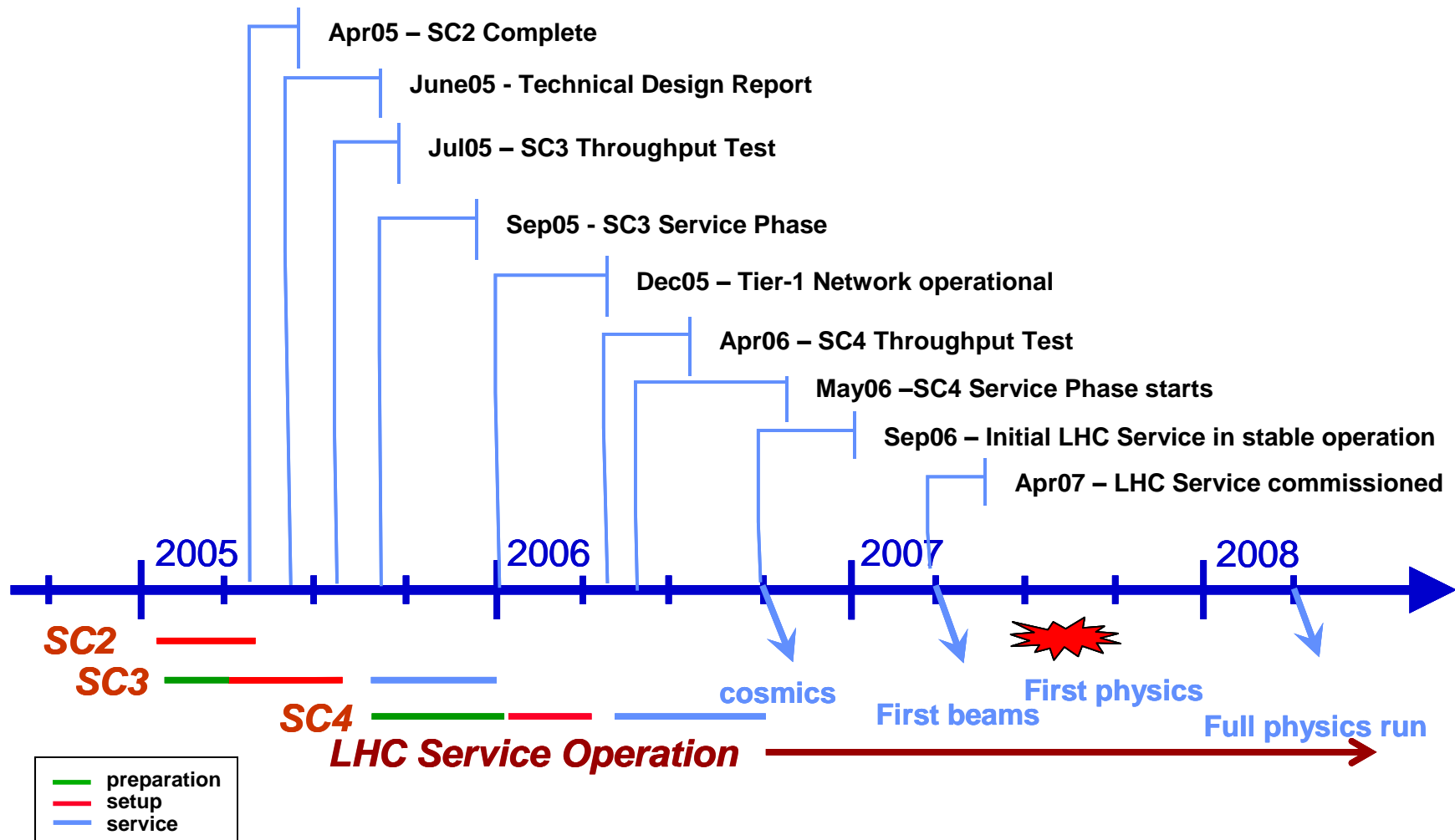


# Background

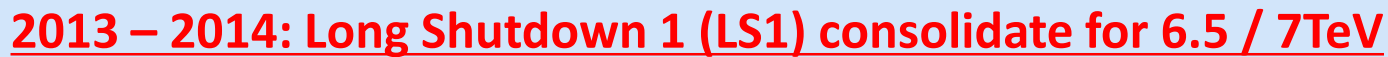
- We have held pre-CHEP workshops in Mumbai ('06), Victoria ('07), Prague ('09) and now **New York**
- We have 120 registered attendees
- Mailing list: *wlcg-workshop-may2012@cern.ch*



# LCG Deployment Schedule



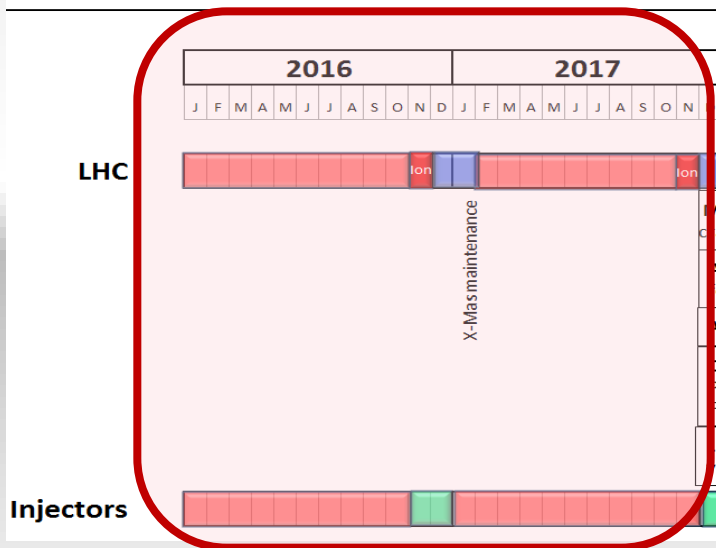
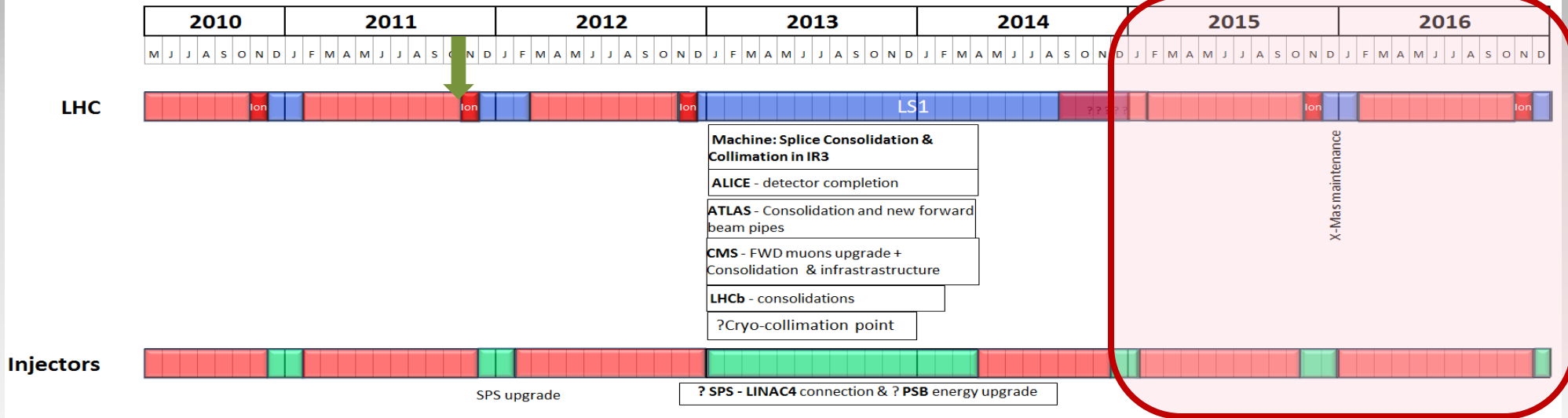
Not yet  
approved!



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# New rough draft 10 year plan

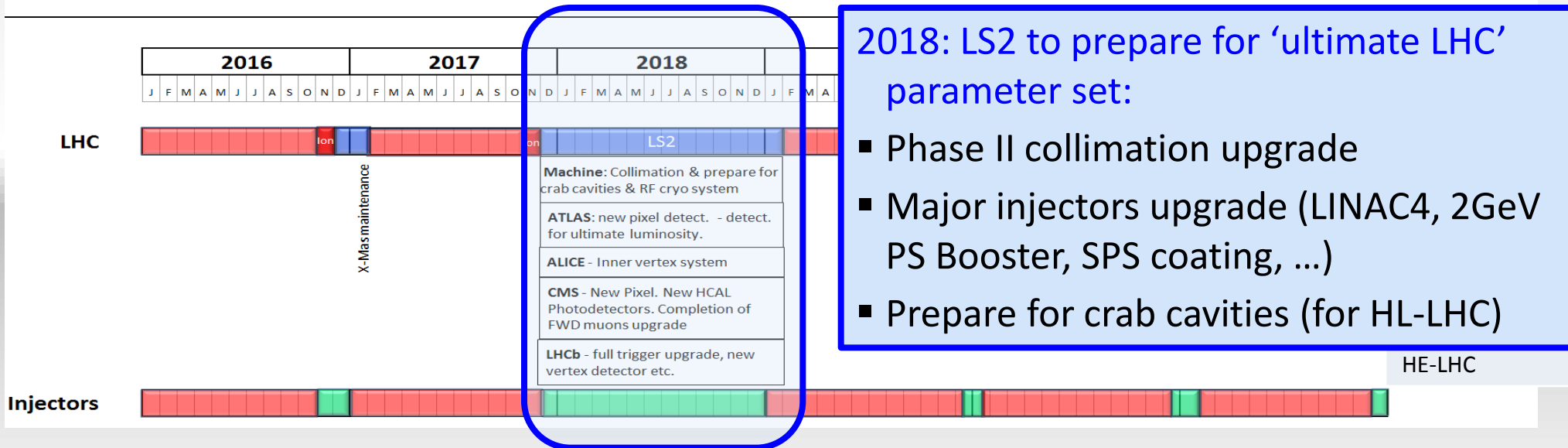
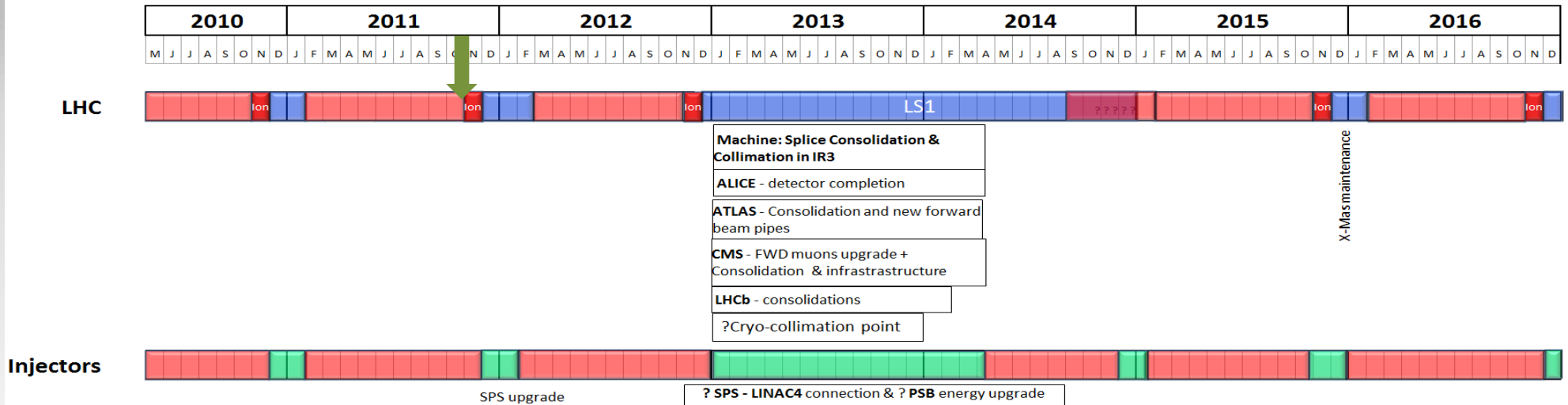
Not yet approved!



**2015 – 2017:**  
**Physics at 6.5 / 7 TeV**

# New rough draft 10 year plan

Not yet approved!

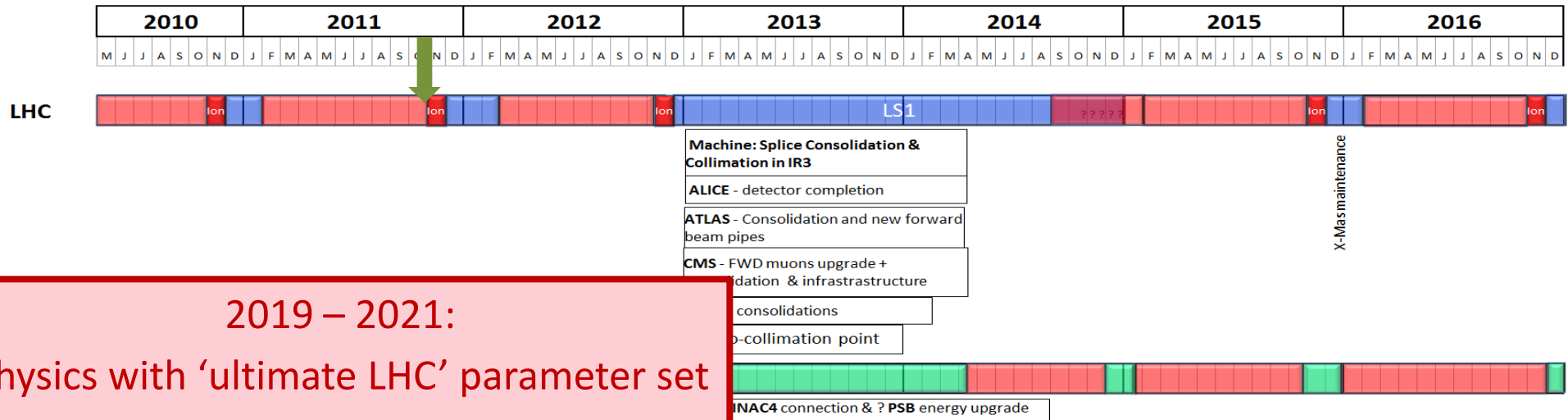


2018: LS2 to prepare for 'ultimate LHC' parameter set:

- Phase II collimation upgrade
- Major injectors upgrade (LINAC4, 2GeV PS Booster, SPS coating, ...)
- Prepare for crab cavities (for HL-LHC)

# New rough draft 10 year plan

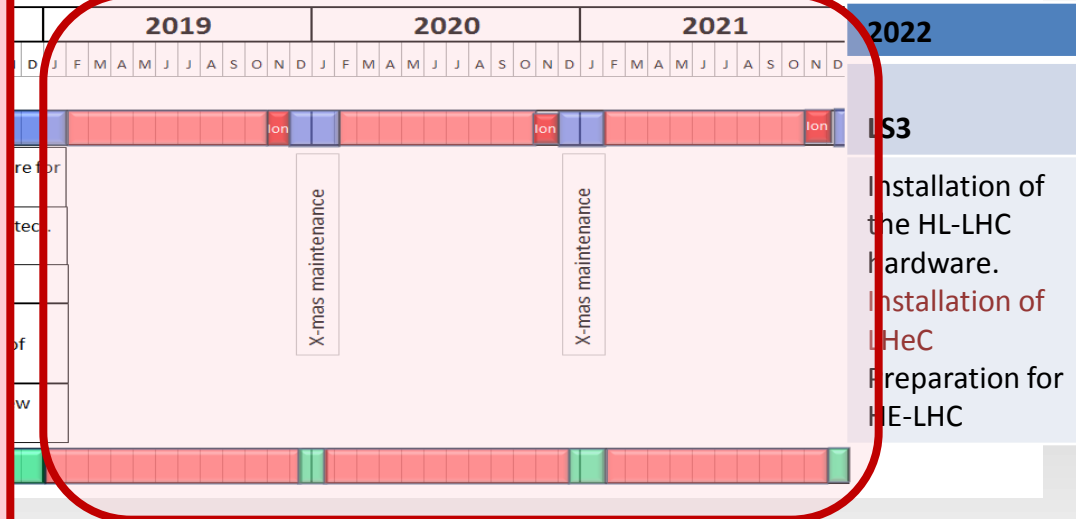
Not yet approved!



2019 – 2021:

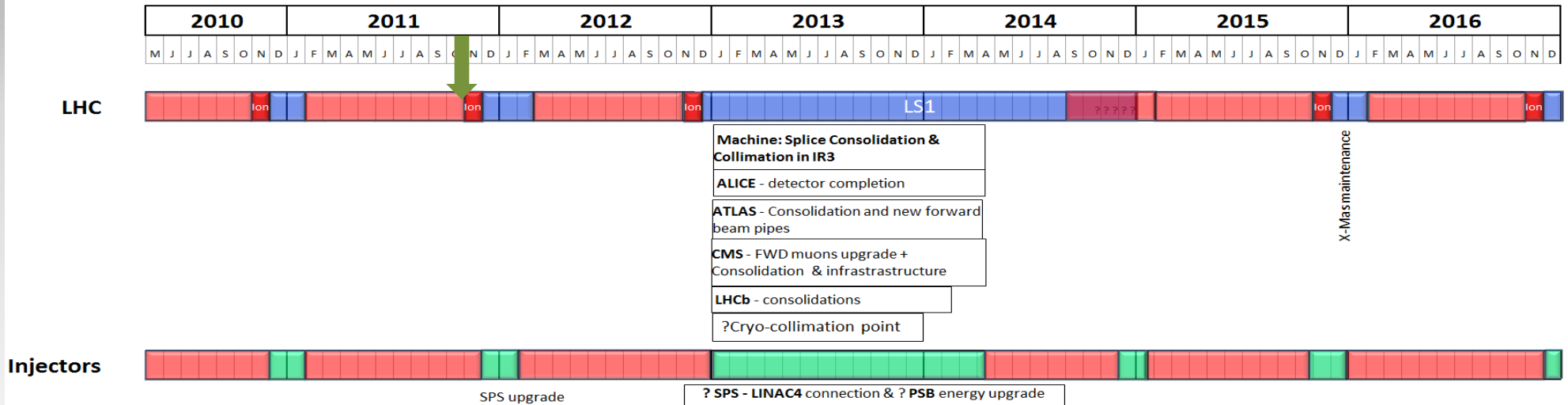
Physics with 'ultimate LHC' parameter set

Parameters	'Ultimate'
k (# of bunches)	2808
N (bunch intensity)	$1.7 \cdot 10^{11}$ p
$\beta^*$	0.5 m
Luminosity [ $\text{cm}^{-2}\text{s}^{-1}$ ]	$2.4 \cdot 10^{34}$
E[TeV]	7
E[MJ]	541



# New rough draft 10 year plan

Not yet approved!



## 2022: LS3

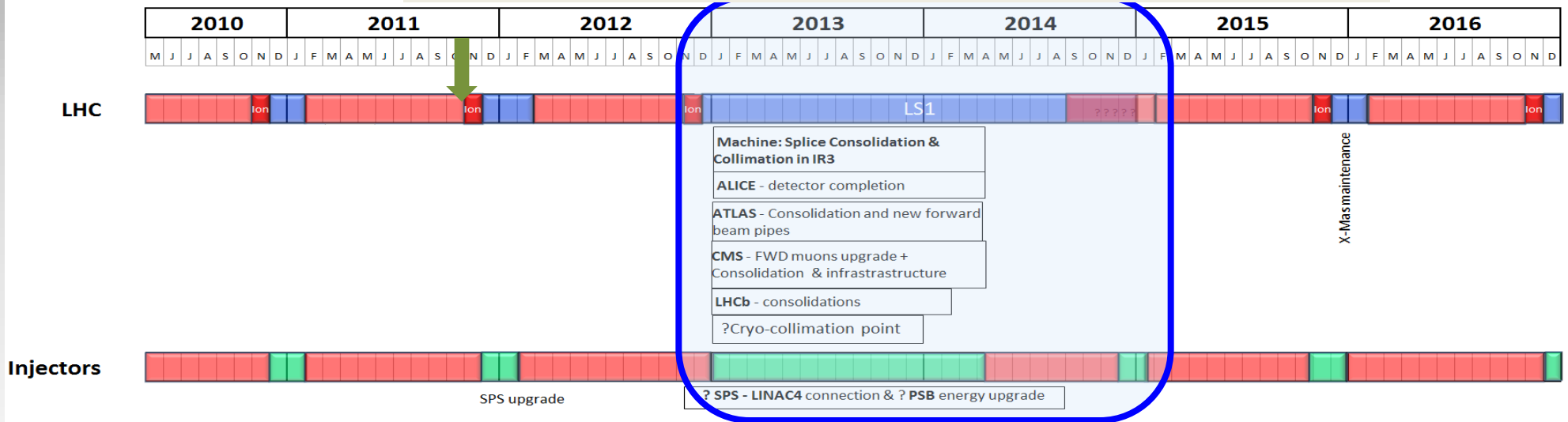
- Installation of HE-LHC and/or
- Installation of LHeC and/or
- Prepare for HL-LHC

2022

LS3

Installation of the HL-LHC hardware.  
Installation of LHeC  
Preparation for HE-LHC

# *LS1 – our immediate future and focus*



## 2013 – 2014: Long Shutdown 1 (LS1) consolidate for next LHC Physics Run

- ...
- ...
- Changes and actions to be discussed at this workshop and beyond...
- ...
- ...
- ...

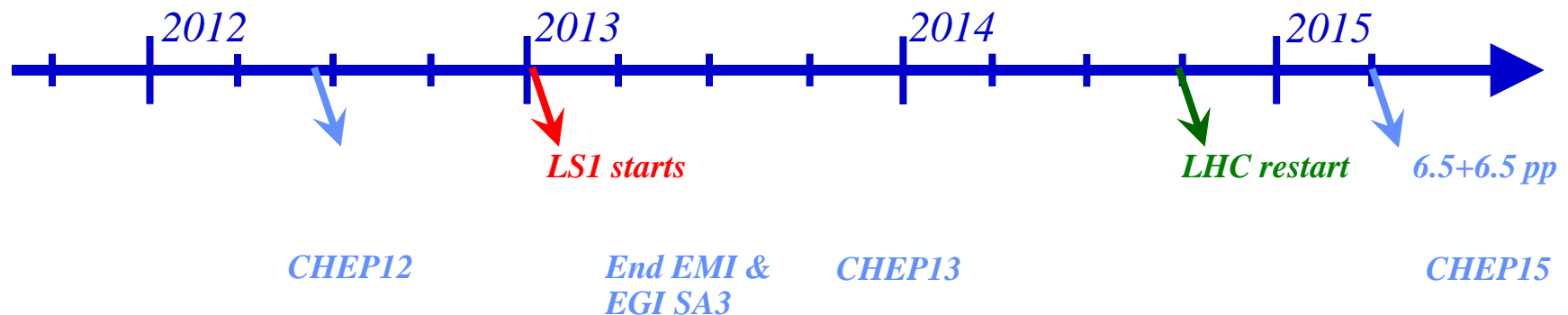
# Outline Agenda

- Follows sessions outlined early 2012 but updated to reflect recent activities, e.g. finalisation of TEG reports plus *“exciting new development”* on Feasibility Study on Common Analysis Framework
- *Keep agenda agile and relatively loose – discussion and networking is one of main reasons for these events*
- Agenda may change – even as we talk!



# WLCG "Energy" Upgrade - Tentative Schedule

- New Tier0 in operation?
- New Tier1s in operation?
- Deployment of *glexec*?
- Deployment of monitoring enhancements?
- Decommissioning of LFC? WMS? Other services?
- Deployment of Storage Accounting?
- Deployment of FTS 3.x?
- Scale Test of "Horizon 2015" environment?



# "Horizon 2015" - the Next Physics Run

- Need to be ready for LHC restart **late 2014** (?)
- Minor adjustments and repairs possible in expected shutdown of that year
- This means that we have 2 years to be on the safe side...
- **Starting today**, understand all the changes desired / required, the on-going production activities and fit them into the "**Horizon 2015**" plan
- Monitor regularly - 6 monthly topical workshops in addition to GDB / MB?
- Will we need a series of integration tests? A suivre...

# Future Workshops

- CHEP 2013 will be in October, Amsterdam
- CHEP 2015 will be in A-P(?), “around time of 6.5+6.5 TeV collisions” (IMHO)
- Probably not appropriate for schedule that we need to develop to prepare for “Horizon 2015”

N.B. production will continue and must not be disrupted!

- Non-CHEP workshops, in DESY, IC, CERN, ...



# Workshop Wrap-up

- On Sunday evening there is a short wrap-up session that currently includes:

- **First draft of Horizon 2015 timeline;**

- Awards!

- Tonight there is a reception!

The Service is  
the Challenge