

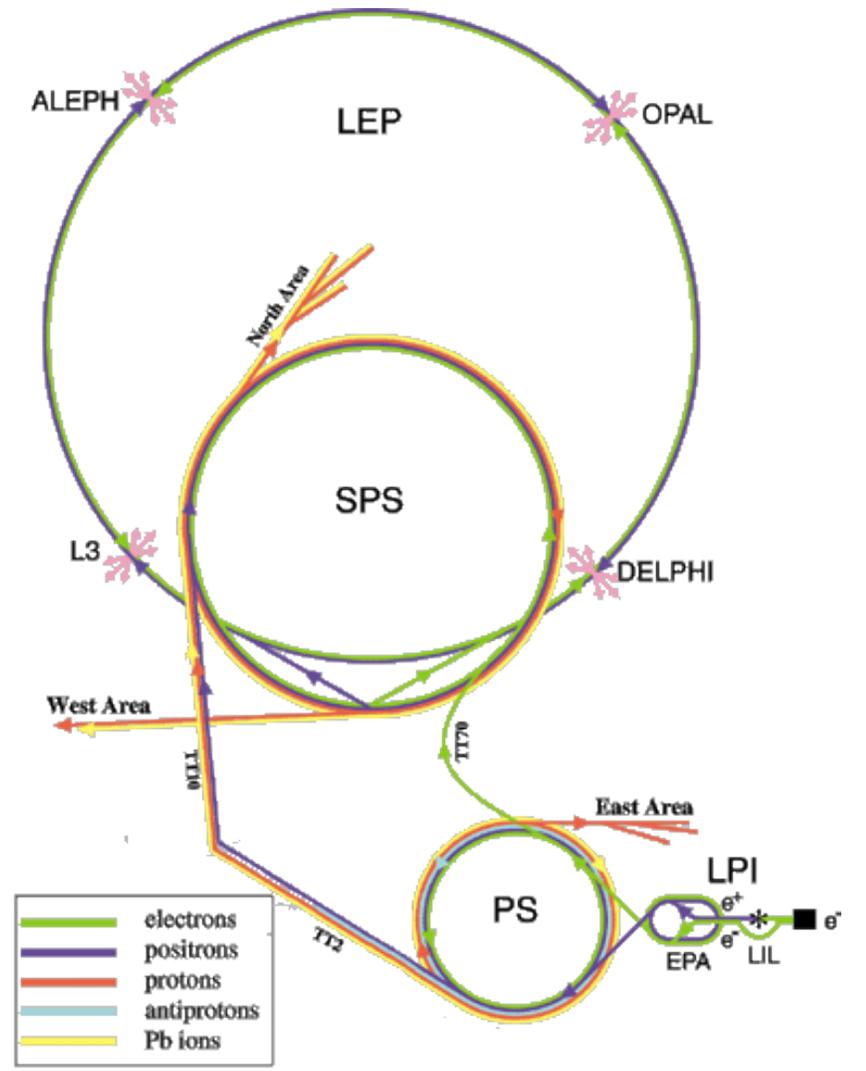
Comment démarrer un nouvel accélérateur de particules

LEP et LHC

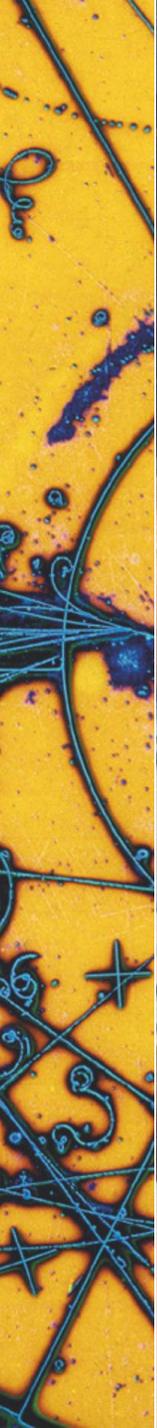
Frédéric Bordry

En partenariat avec

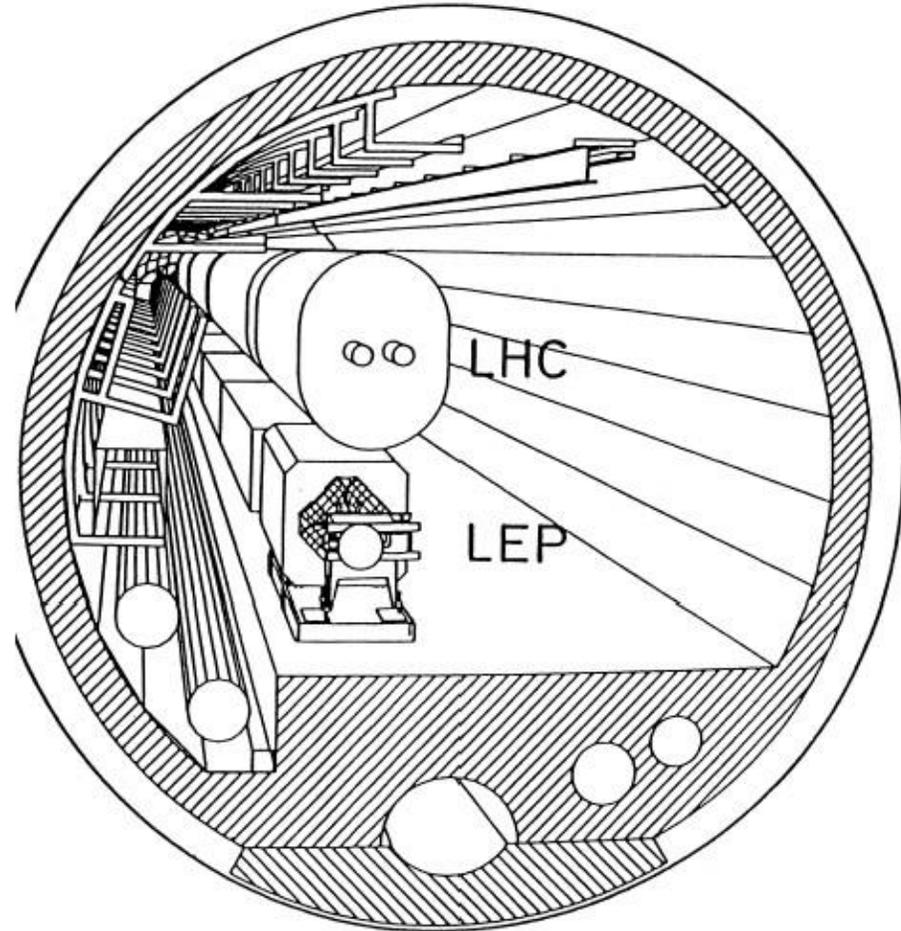




LEP: Large Electron Positron collider LPI: Lep Pre-Injector
 SPS: Super Proton Synchrotron EPA: Electron Positron Accumulator
 PS: Proton Synchrotron LIL: Lep Injector Linac



14 juillet 1989
Premier faisceau LEP



LARGE HADRON COLLIDER IN THE LEP TUNNEL

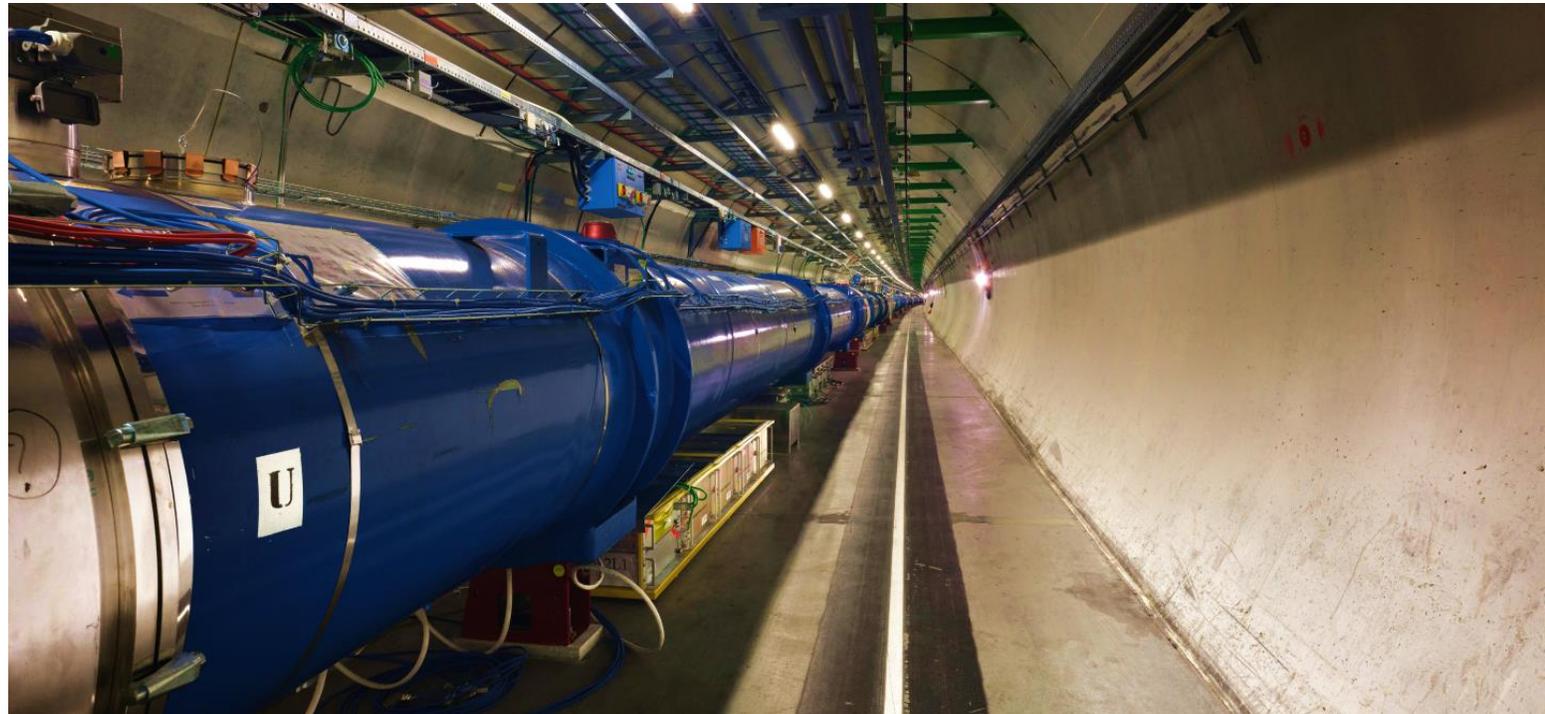
Vol. I

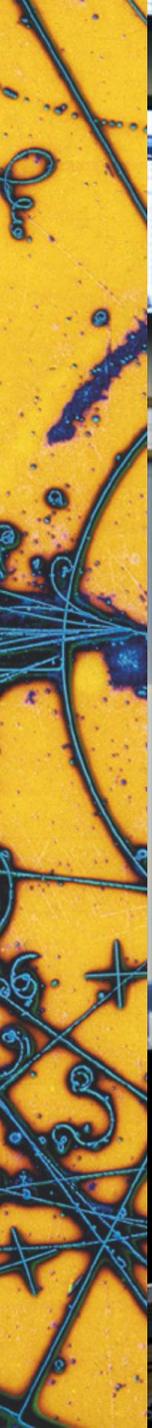
PROCEEDINGS OF THE ECFA-CERN WORKSHOP

held at Lausanne and Geneva,
21-27 March 1984

- | | | |
|-----------|---|---|
| 1984 | : | Etudes conceptuelles préliminaires du LHC |
| 1988 | : | Premiers modèles d'aimants (faisabilité) |
| 1994: | : | Approbation par le Conseil du CERN
<i>(sous la présidence d'Hubert Curien)</i> |
| 1996-1999 | : | Industrialisation des productions de série |
| 1998 | : | DUP & début du génie civil |
| 1998-2000 | : | Passation des principaux marchés |
| 2004 | : | Début de l'installation dans le tunnel |
| 2005-2007 | : | Installation des aimants dans le tunnel |
| 2007 | : | Test fonctionnel du premier secteur |

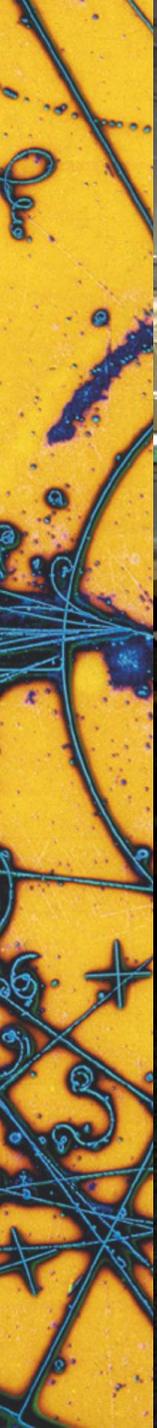
10 septembre 2008 : Premier faisceau





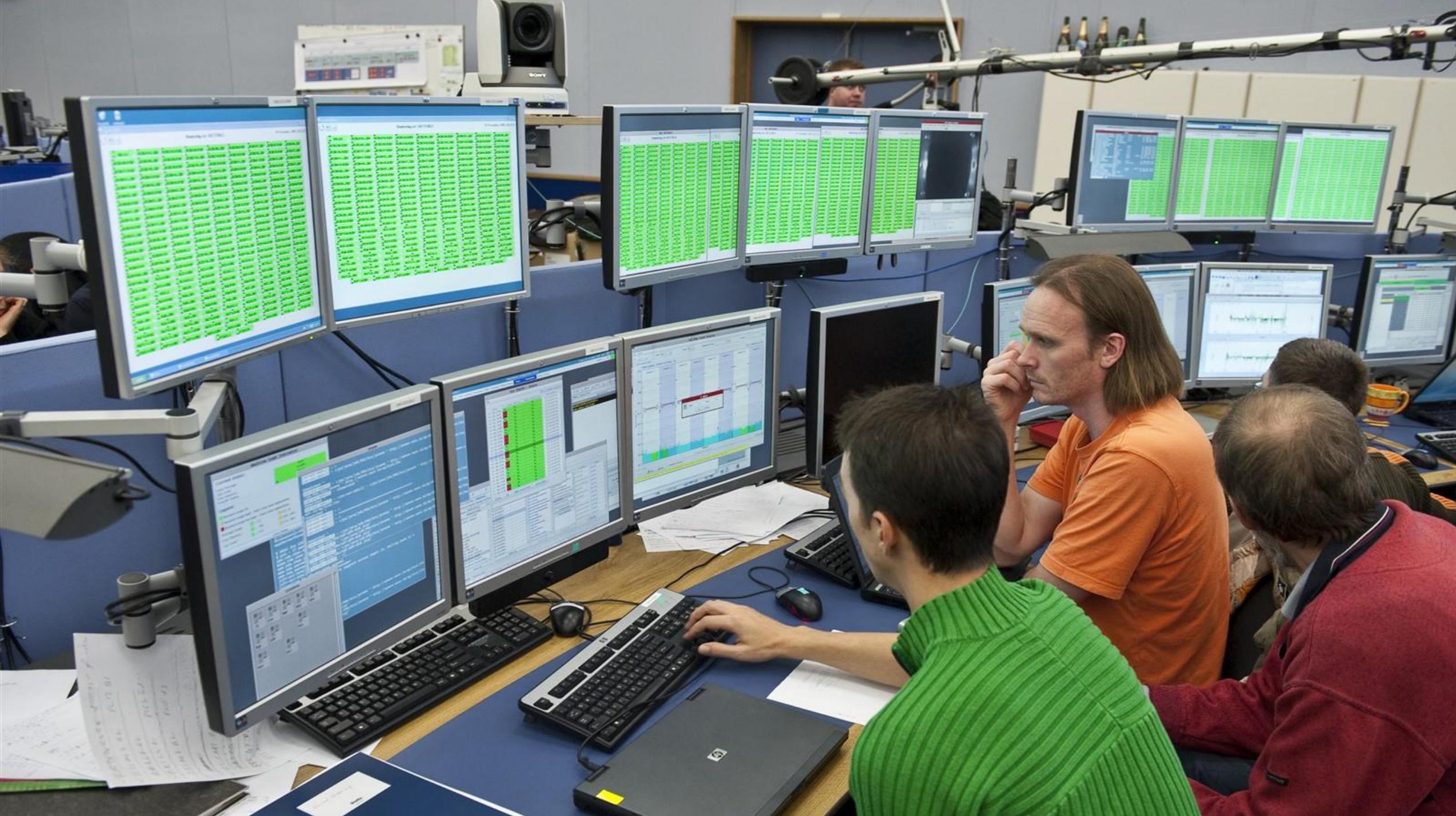
15 avril 2008: Peter Higgs

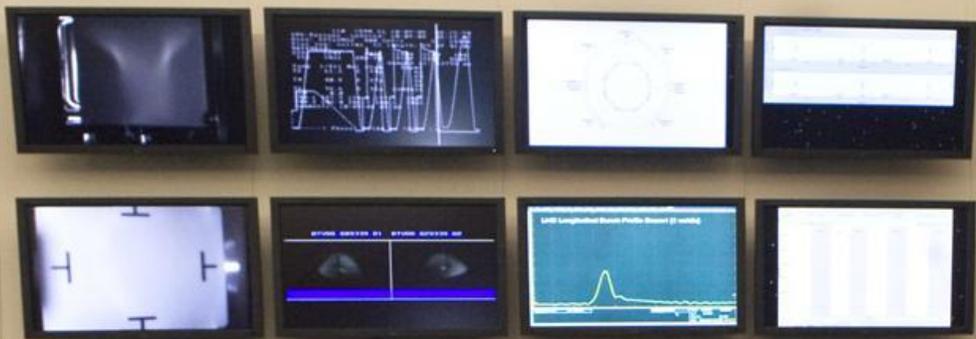




10 septembre 2008

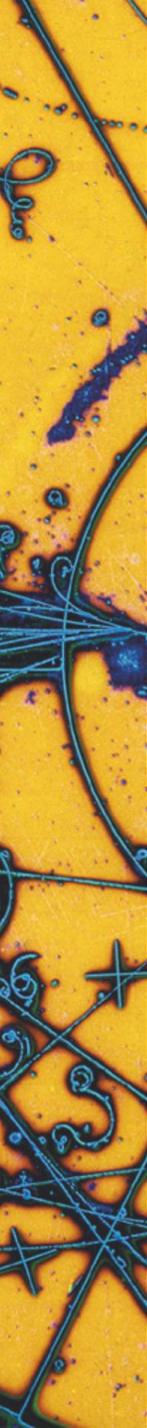






LHC first beam 10 September 2008





10 septembre 2008



10 septembre 2008

10 septembre 2008



10 septembre 2008

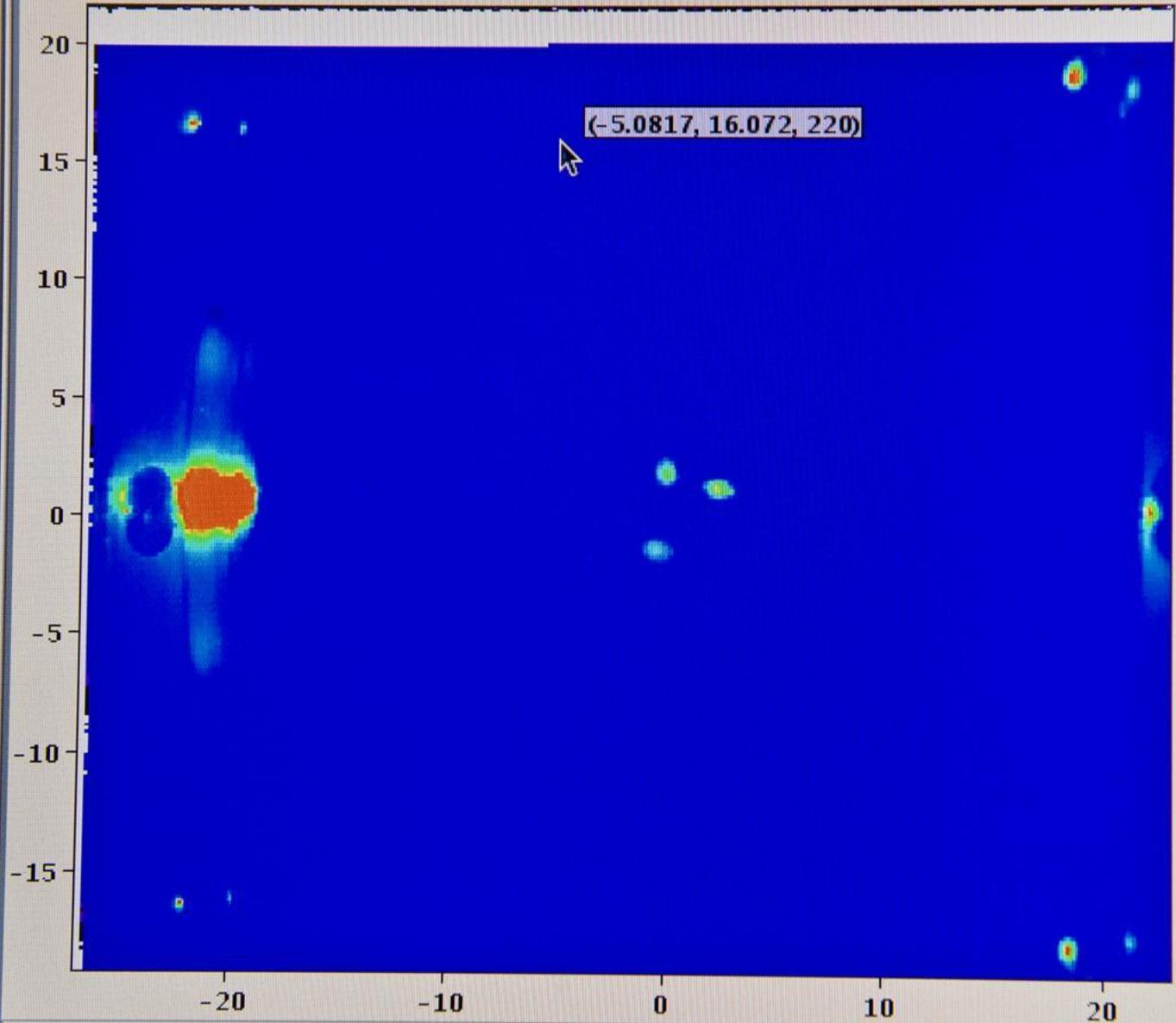


secondLamp

(short:1) -> 199

Active keys : [X] -> x axis, [Y] -> y axis, [Z] -> z axis (image), [D] -> display line, [H]->display histogram, [SPACE] -> clear,...

Data for Cycle: -



Point # 48125 X -5.0817 Y 16.072 Z

	Directive
	RUN

Step Skip Interrupt

Reconnect to Safe mo...

En par



ces



10 septembre 2008

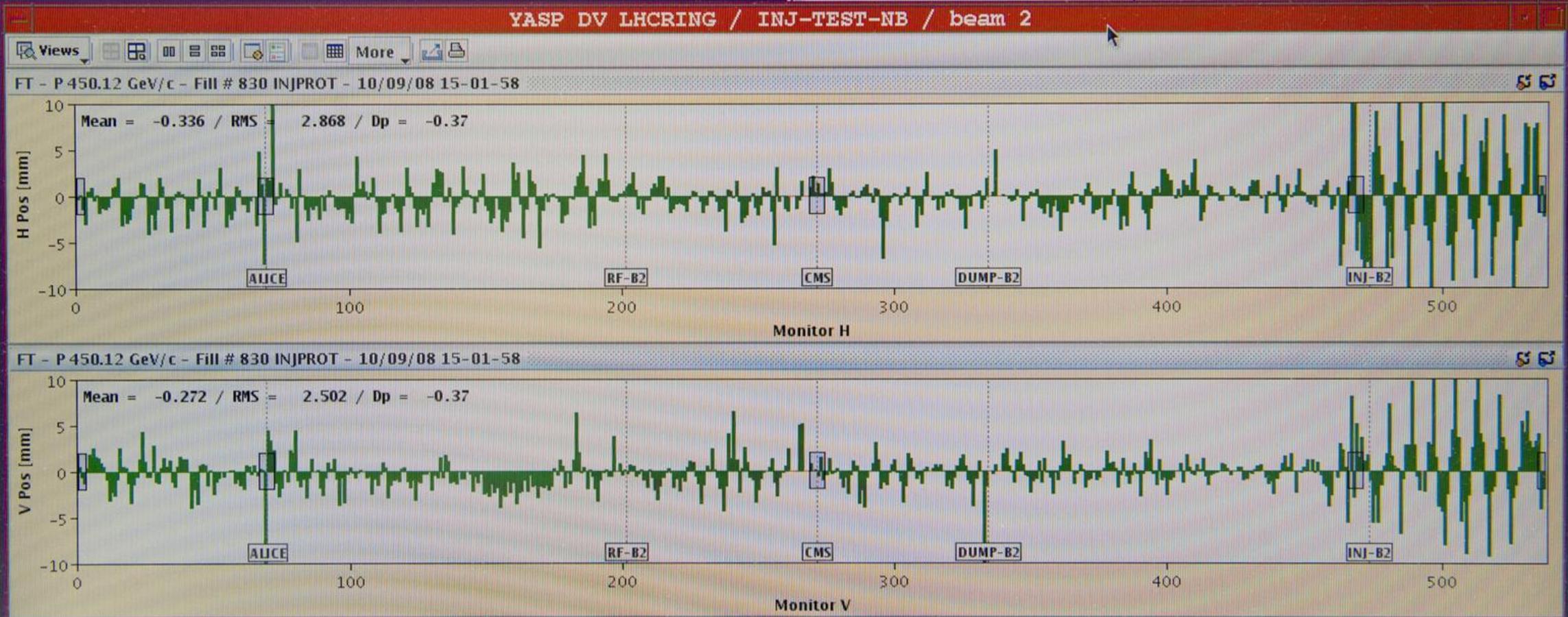
FTurn Orbit
 FT type: **FT-FIFO**
 CO type: **CO-1HZ**
 Read CODs
 Autosave Simulation
 Difference **Load Last**

Threading
 Plane: Horizontal Vertical
 # Correctors:
 Bare Subtract dP/P offset
 Matrix Reconditioning
 Iteration Details
 Iteration Info

```

Updated catalog LHC-REF
Updated catalog LHC-REF
Open catalog file lhcref-90.gz
Data read from /user/slops/steering/yasp/catalogs/lhcref

Data header :
-----
Transfer      LHCRING
Context       INJ-TEST-NB / INJ-TEST-NB_V1@0_[START]
Twiss         A1100C1100A1000L1000P-NB
P             450.12 GeV/c
Date          10/09/08 15-01-58
Mode          STurn
Fill          830 INJPROT
COD Settings  YES
    
```



10-09-2008 15:03:39

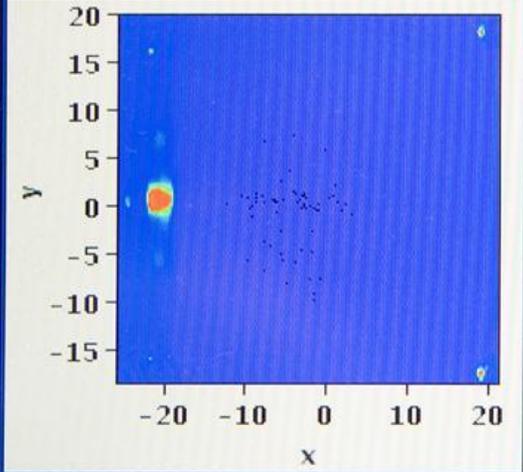
BEAM SETUP: INJECTION PROBE BEAM

TED T12 position: **BEAM** TED T18 position: **BEAM**

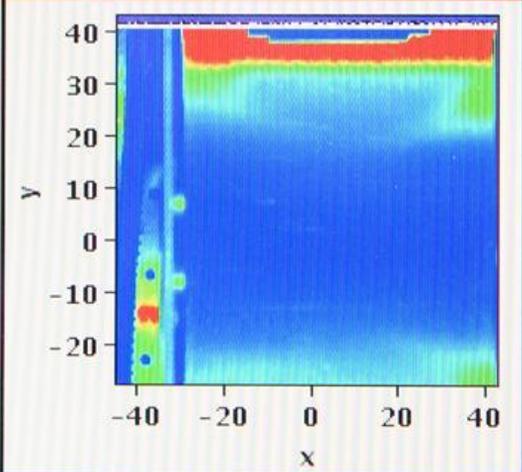
TDI P2 gaps/mm	upstream: 29.83	downstream: 30.16
TDI P8 gaps/mm	upstream: 29.98	downstream: 30.00

BCT T12:	0.00e+00	BCT T18:	0.00e+00
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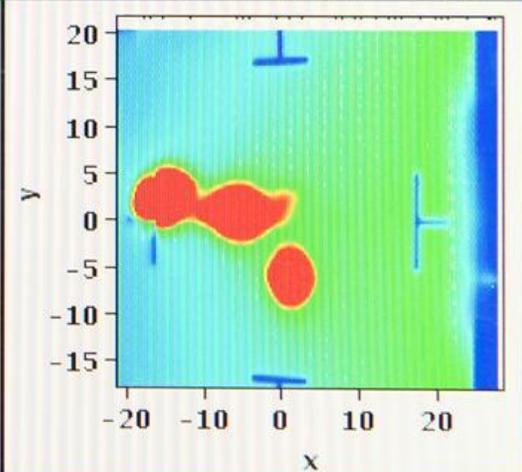
BTVSI.C5L2.B1 Updated: 15:03:22



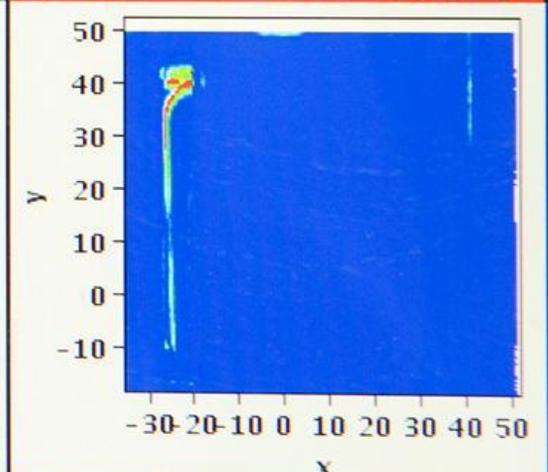
BTVSI.C5L2.B1 Updated: 15:03:22



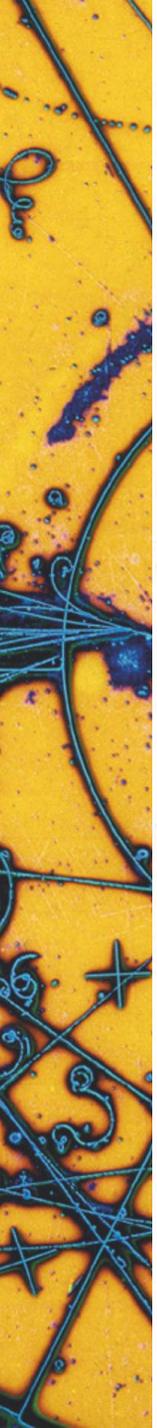
BTVSI.C5R8.B2 Updated: 15:03:22

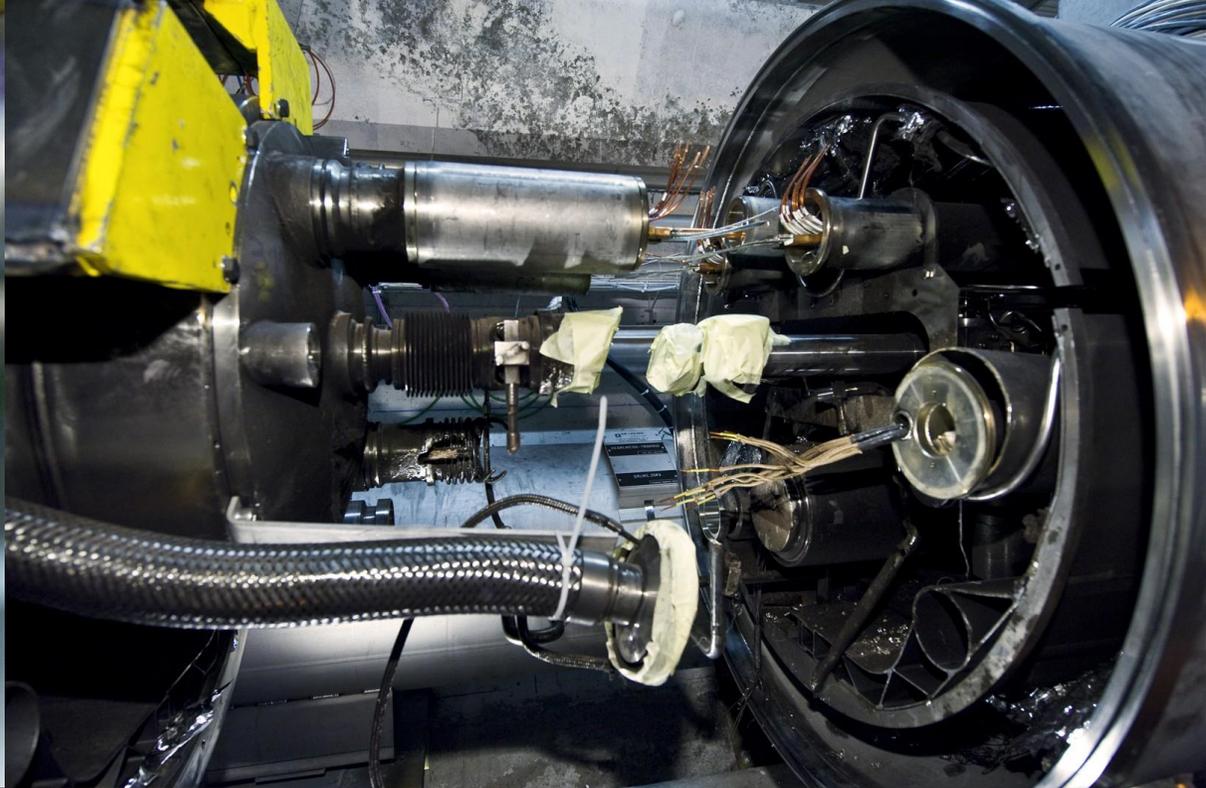
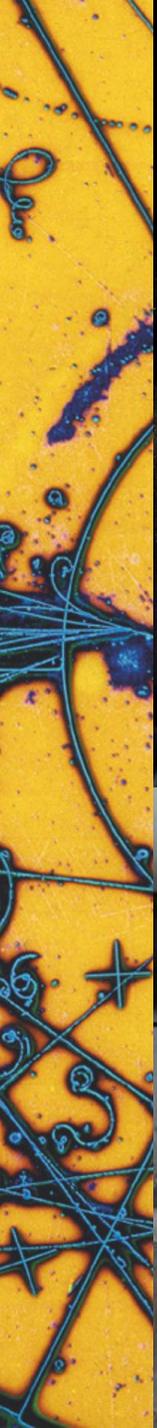


BTVSI.C5R8.B2 Updated: 15:03:22



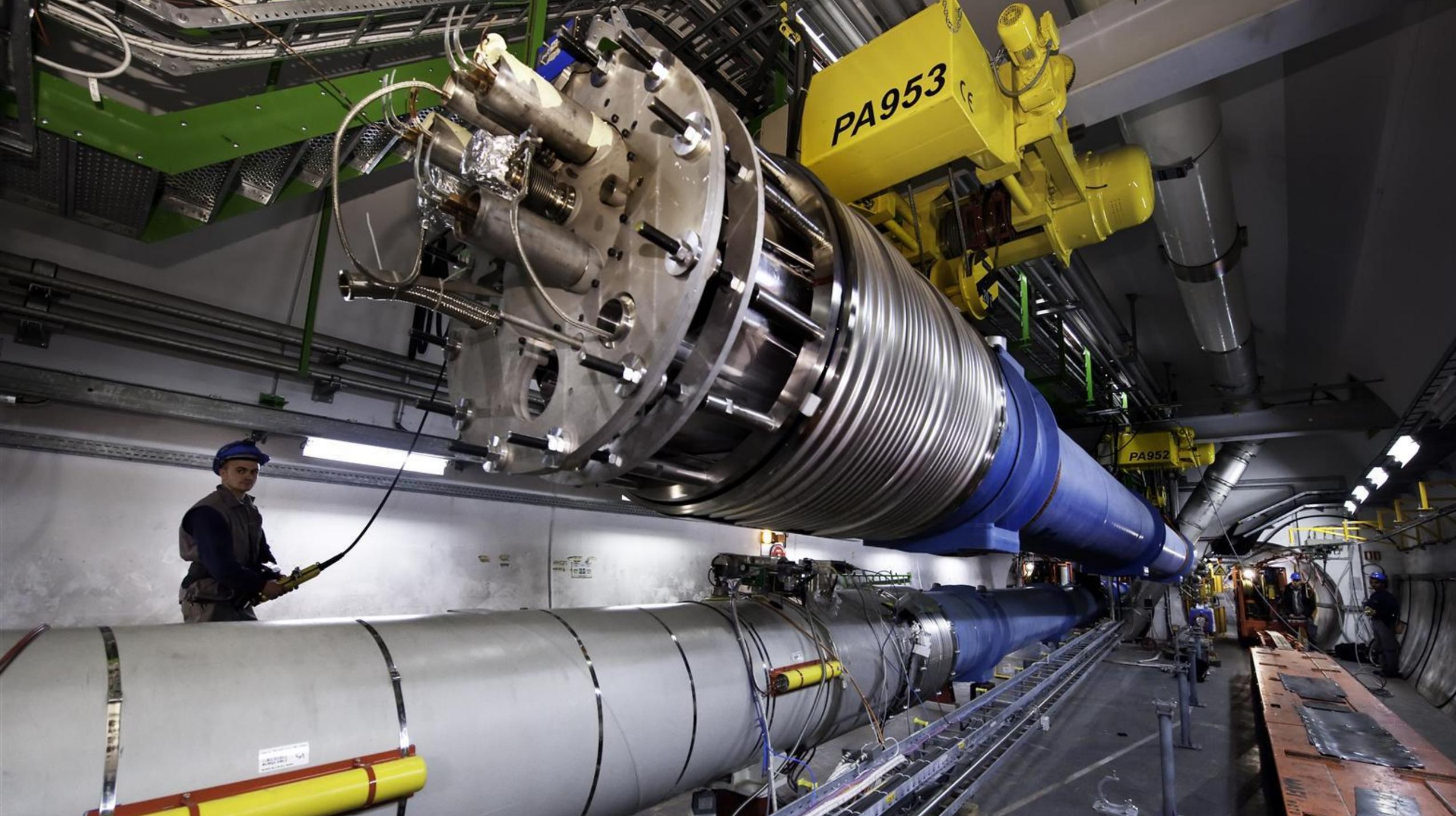
Comments 10-09-2008 15:03:08 :





221 octobre 2008: inauguration du LHC





PA953

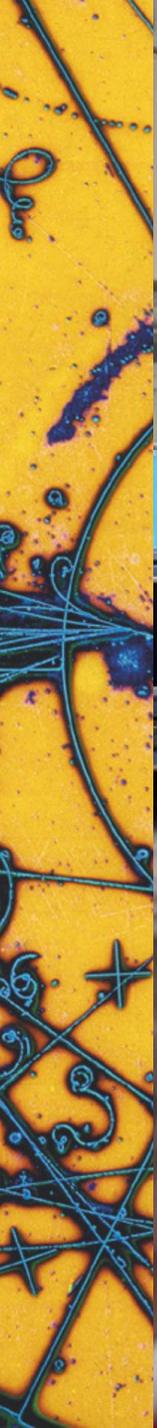
PA952



20 novembre 2009



20 novembre 2009



23 novembre 2009 : attente de la première accélération



23 novembre 2009: première accélération



