

# Availability of Heavy Ions for SPS Fixed Target Physics

## Availability of Heavy Ions for SPS Fixed Target Physics (1/2)

Until Nov. 2003, Heavy Ions for Fixed Target physics were produced via :

Ions source - Linac 3 - PS Booster - PS - SPS

Since then, the production of Lead Ions for LHC has started via :

(new) Ions source - Linac 3 - LEIR - PS - SPS

⇒ The previous Heavy Ions route via the PSB is not available anymore as synchronisation PSB/Linac3 has been disactivated and converted into a synchronisation LEIR/Linac3

## Availability of Heavy Ions for SPS Fixed Target Physics (2/2)

### Planning of the Lead Ions for LHC :

- Linac3 start up with Pb ions 02/2005
  - Linac3 to LEIR injection line commissioning 06/2005 to 08/2005
  - LEIR commissioning 08/2005 to 03/2006
  - PS commissioning : 25 shifts in 2006 (6 dedicated MDs)
  - SPS commissioning : 34 shifts in 2007 (24 dedicated MDs)
  - LHC commissioning and physics with "early beam" : 2008
- ⇒ Lead ions can only be available for Fixed Target physics
- when they are available in the SPS and
  - when they have been tuned for Fixed Target operation  
(different beam in SPS than for LHC)
- ⇒ With the present I-LHC schedule, Lead ions can only be available after the ion LHC commissioning in 2008