

# Agenda

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- **Comments to minutes**
- **General Information**
  
- **Status of the new SPS hardware interlocks and its relation to the LHC beam interlock system (J.Wenninger)**
  
- **Evaluation of a Fast PLC Module for the Beam Interlock System (M.Zaera Sanz)**
  
- **AOB:**
  - **Energy Tracking**
  - **Topics for future meetings**

# General Information

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## **LCC talks 17/7/02**

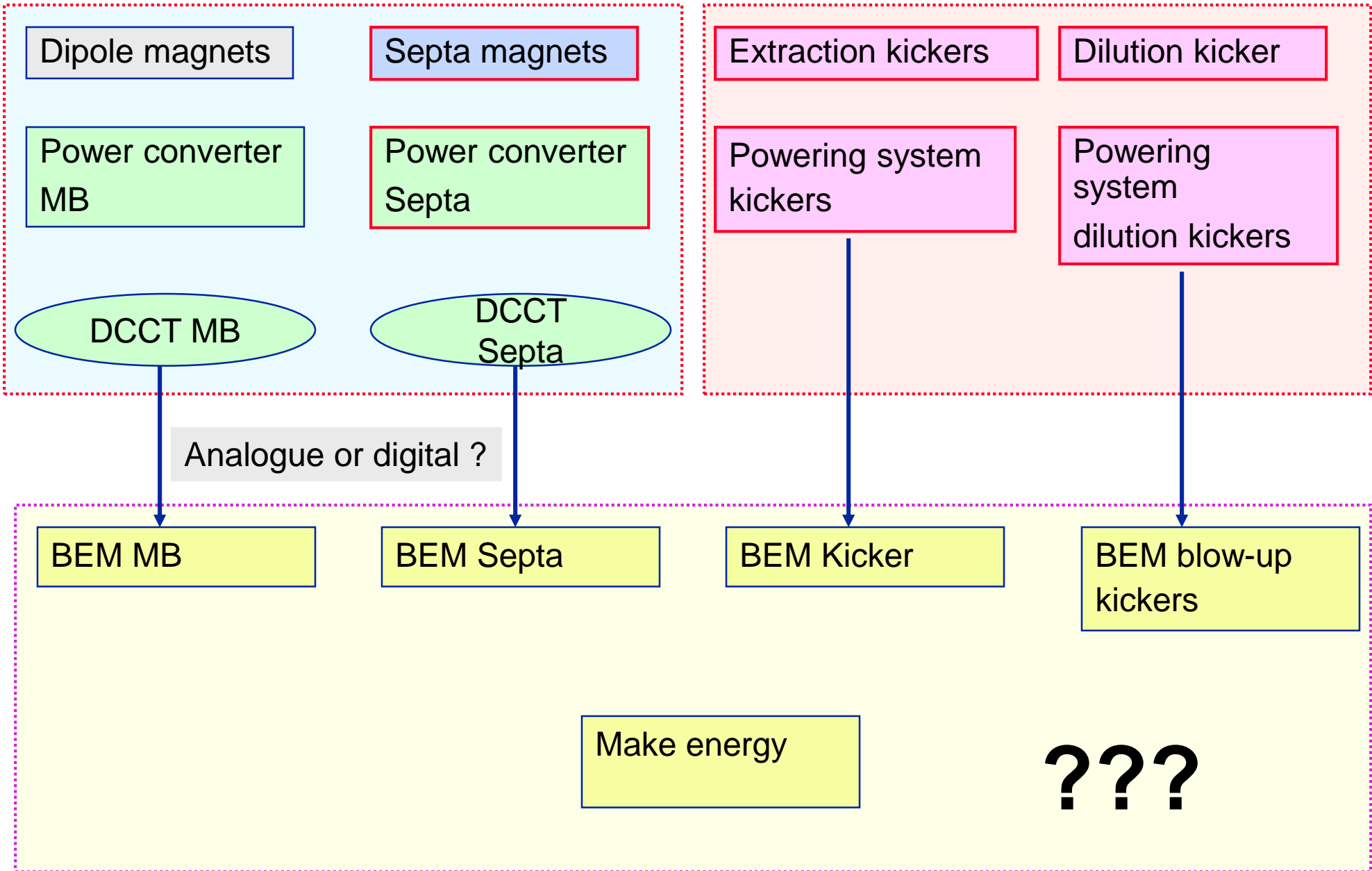
Machine protection requirements for the beam abort gap population (myself)

Beam dump synchronisation (Jörg)

Critical abort gap population derived from quench limits (Bernard)

## **LCC talks next week: Beam Loss Monitors**

Jean-Bernard and Joerg



**System responsibility**

# Energy meter

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From SL/PO (Q.King, G.Fernqvist)

- SL/PO will provide a signal (analogue or digital) that is proportional to the current, for electrical circuits still to be defined (they will include a modification to their design so that measurements of the current can be made available, untreated, to the Beam Energy Meter)
- SL/PO will not be responsible for conversion of current to energy
- Calibration voltages will be available when there is no beam
- The transmission method does not need to be decided now, either analogue or digital could be accommodated on the future interlock link board in the PC

The interlock part ....

- be the responsibility of the beam dump group
- centralise the conversion from magnet current or kicker voltage to energy
- analyse the resulting energy measurement and decide when to dump the beam

## How to go on ...

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- Write a functional specification (E.Carlier, R.Schmidt, J.Wenninger and SL/PO - maybe Q.King?) - before end of the year
  
- Present concept of energy meter to LCC / SL-TC
  - Why is it required? How can it be done? What are the agreed responsibilities?
  - ...possibly with a proposal for the **WHO** that does the interlock part
  - ...or asking the question who would do it

# Future meeting

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## Possible Dates:

- 11 October
- 1 November
- 22 November
- 13 December

## Topics:

- Detector safety systems - are there common interests?
- Powering Interlock System: Engineering specification and consequences for operation (B.Puccio + myself)
- Failure modes for beam loss - consequences for machine protection (V.Kain)
- Aperture in beam dump channel and consequences for operation (B.Goddard, M.Gyr, ...)
- Interfaces between experiments and machine protection system
- Possible impact of the classification of the LHC as INB on the machine protection system