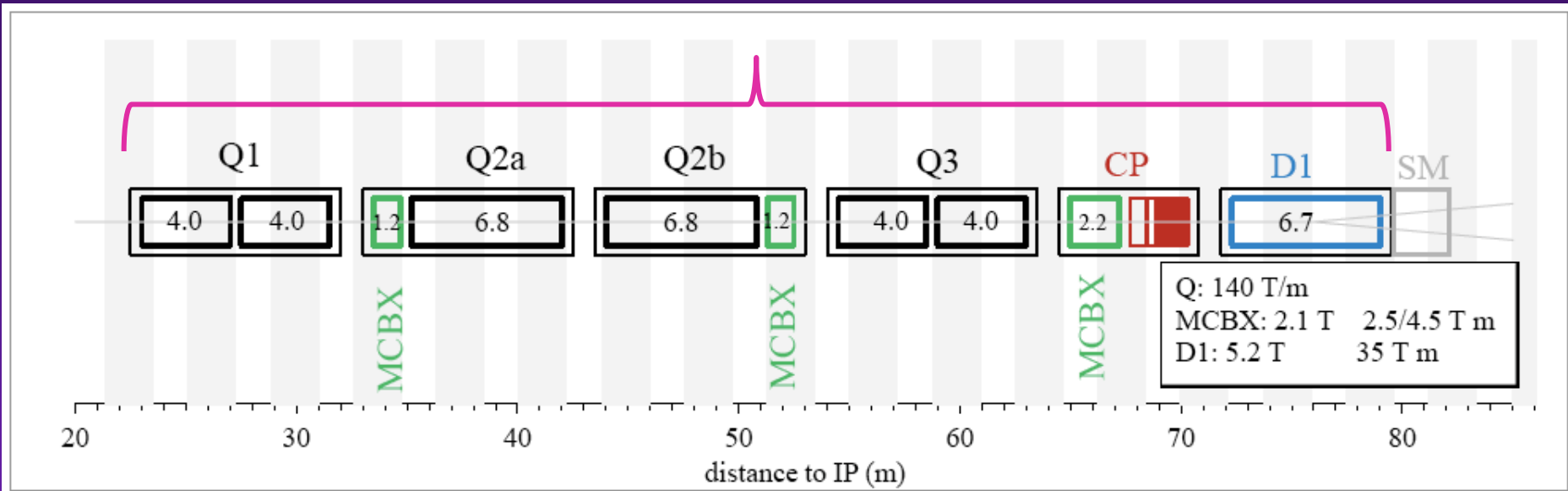


# ACTIONS FROM 7<sup>TH</sup> HL-LHC WP2 TASK LEADER MEETINGS (of 07/05/13)

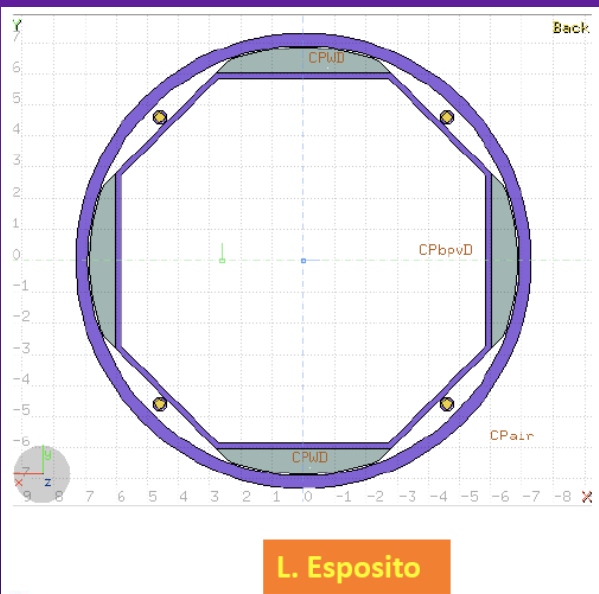
Elias Métral

- ◆ **See** <https://indico.cern.ch/getFile.py/access?contribId=5&resId=1&materialId=slides&confId=250482>  
**=> 2 actions for new bean screens of the triplets**
  - Impedance?
  - E-cloud?
- ◆ **Proposed deadline => ~ Mid june**

# NEW BEAM SCREENS



E. Todesco



L. Esposito

- ◆ Cold bore: Inner Diameter (ID) = 138 mm
- ◆ Octagonal shape for beam screen
  - 2 mm of SS. ID (inscribed circle) = 121 mm
  - Cu coating to be defined
  - Tungsten absorbers (light blue): 6 mm (at the max.)
- ◆ 4 times in total: 2 IPs (1&5) and 2 / IP

# WORK TO BE DONE

## I) Impedance studies

- 1) Impedance contributions for the present triplets alone?
- 2) Impedance contributions for these new triplets, assuming the same shape as in previous page for the full length?
- 3) Impedance contributions for these new triplets, assuming that Q1 is smaller? => Tungsten thickness of 16 mm instead of 6 mm
- 4) What is the required tapering in the transition Q1/Q2A?
- 5) What about the Y-chamber whose angle should be bigger (D1 going from  $\sim 26$  T m to  $\sim 35$  T m)

## II) E-cloud studies

- 1) E-cloud effects for the present triplets alone?
- 2) E-cloud contributions for these new triplets, assuming the same shape as in previous page for the full length?
- 3) E-cloud contributions for these new triplets, assuming that Q1 is smaller? => Tungsten thickness of 16 mm instead of 6 mm