



**EMU Meeting 04-05 Oct 02**

# ***EMU Cable Labeling***

**S. Lusin**

**University of Wisconsin**



# Labeling overview ...

**Austin Ball: proposed labeling scheme at June CMS week plenary session**

**EMU group: CMS IN 2000/004, CMS IN 2002/nnn, descriptions of detector numbering schemes, extending to cable labeling**

## **Cable Species:**

- **On-chamber cables**
- **Chamber- peripheral crate cables**
- **Lateral interconnects**
- **Readout cables**

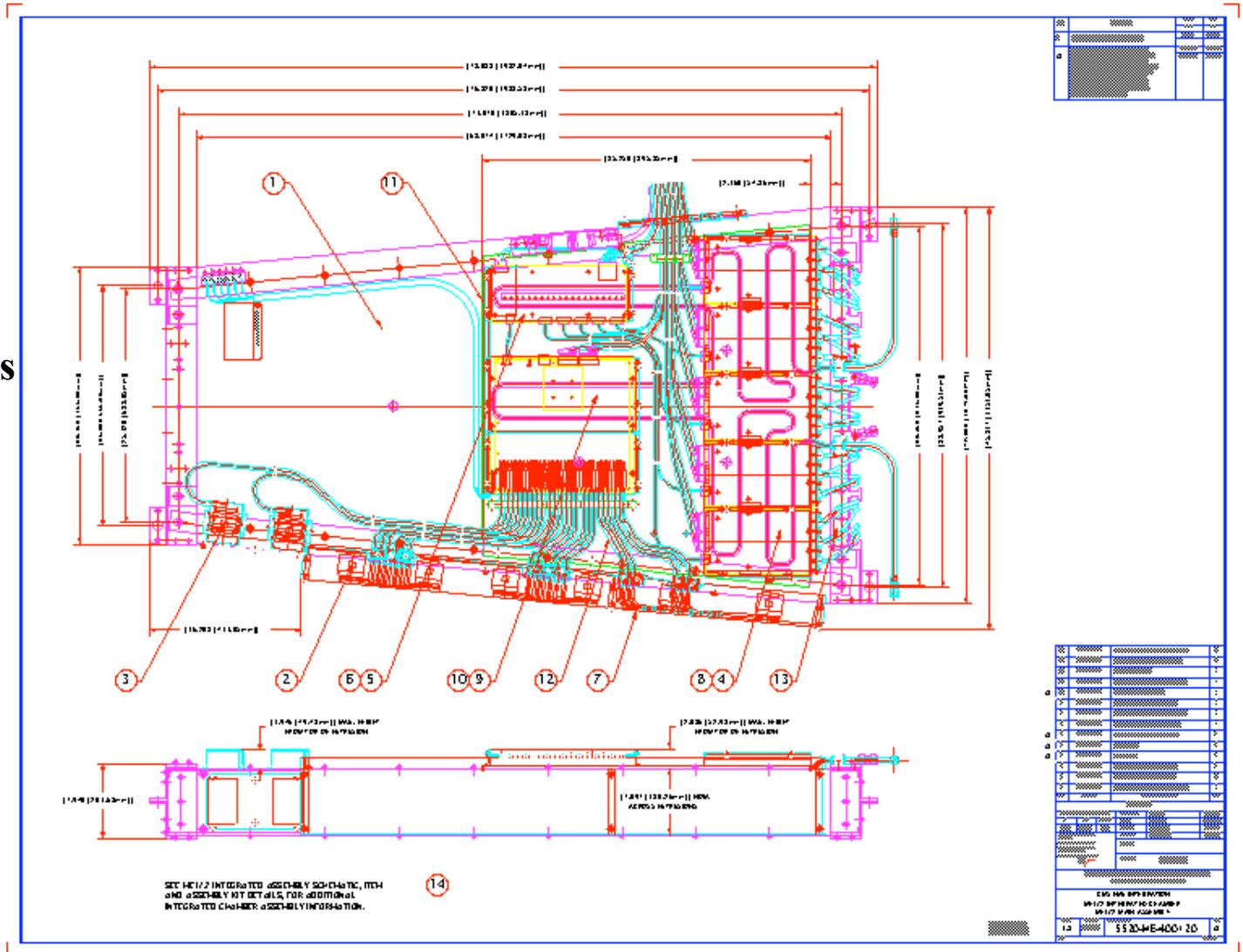


# On-Chamber Cabling

Typically installed prior to mounting on disk

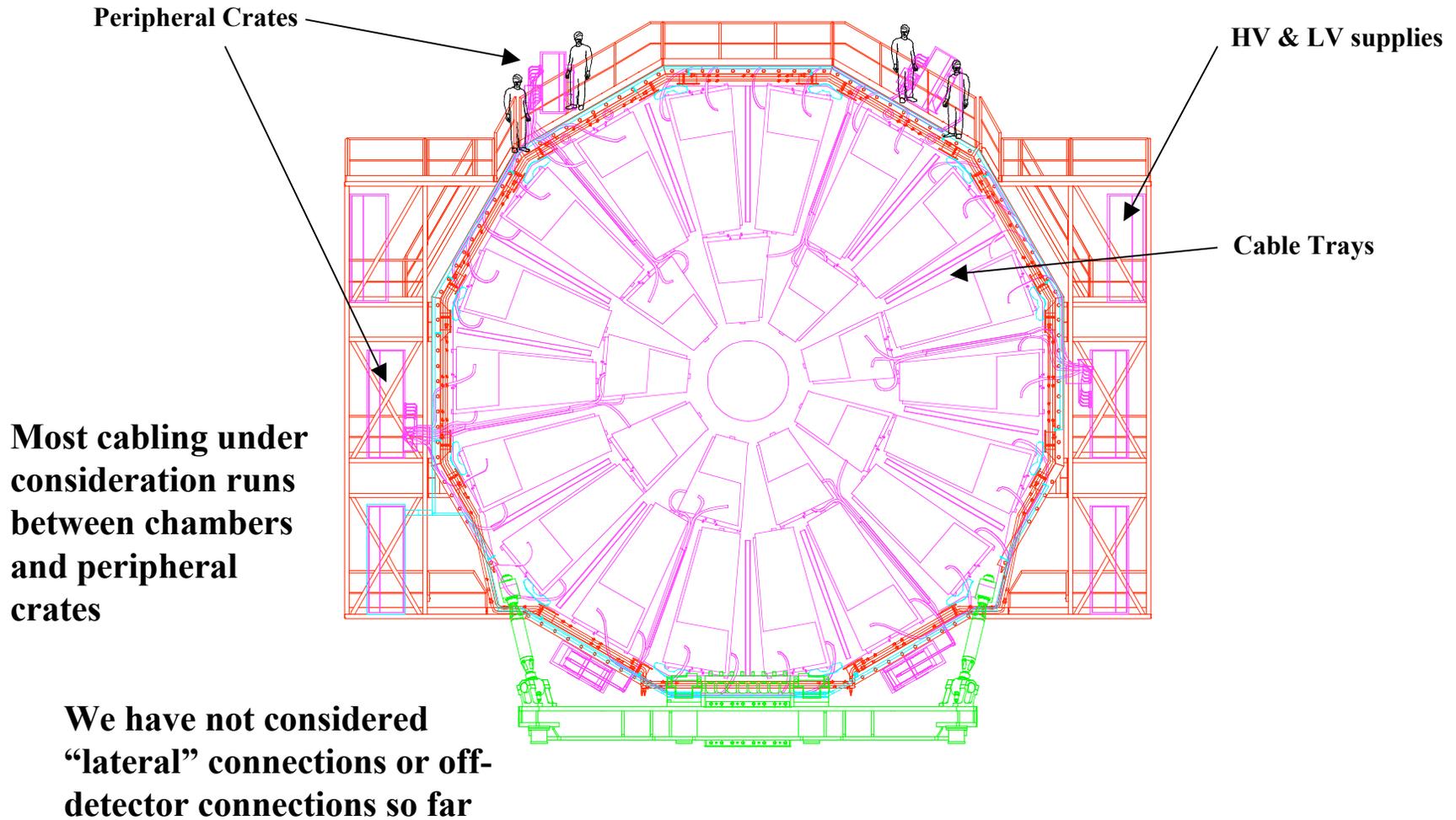
On-chamber cables need no “global reference” labeling

Provide assembly & inventory information





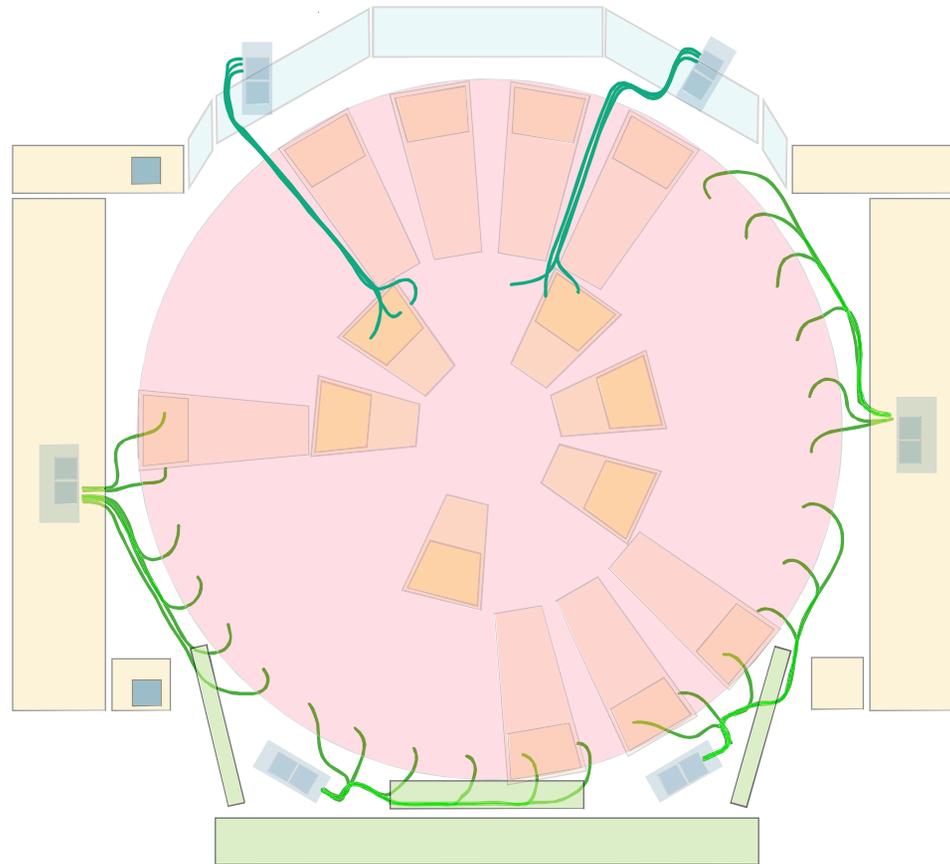
# Cable paths- YE2





# Peripheral crate cabling

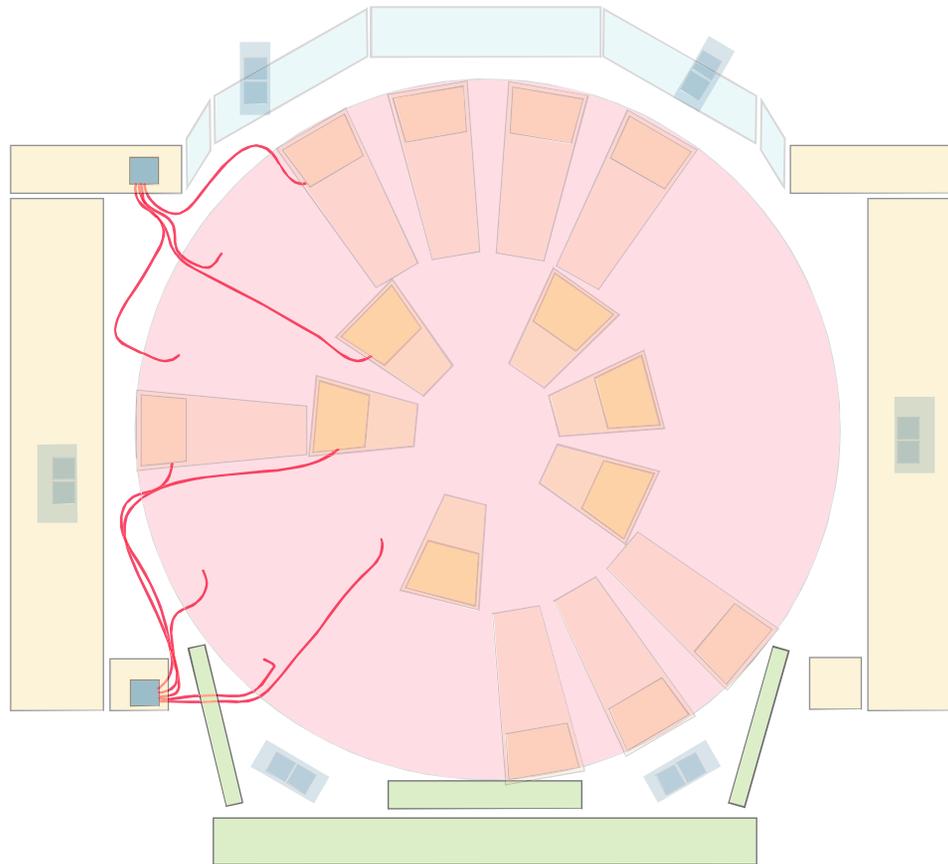
## Typical skewclear cable runs





# LV supply cabling

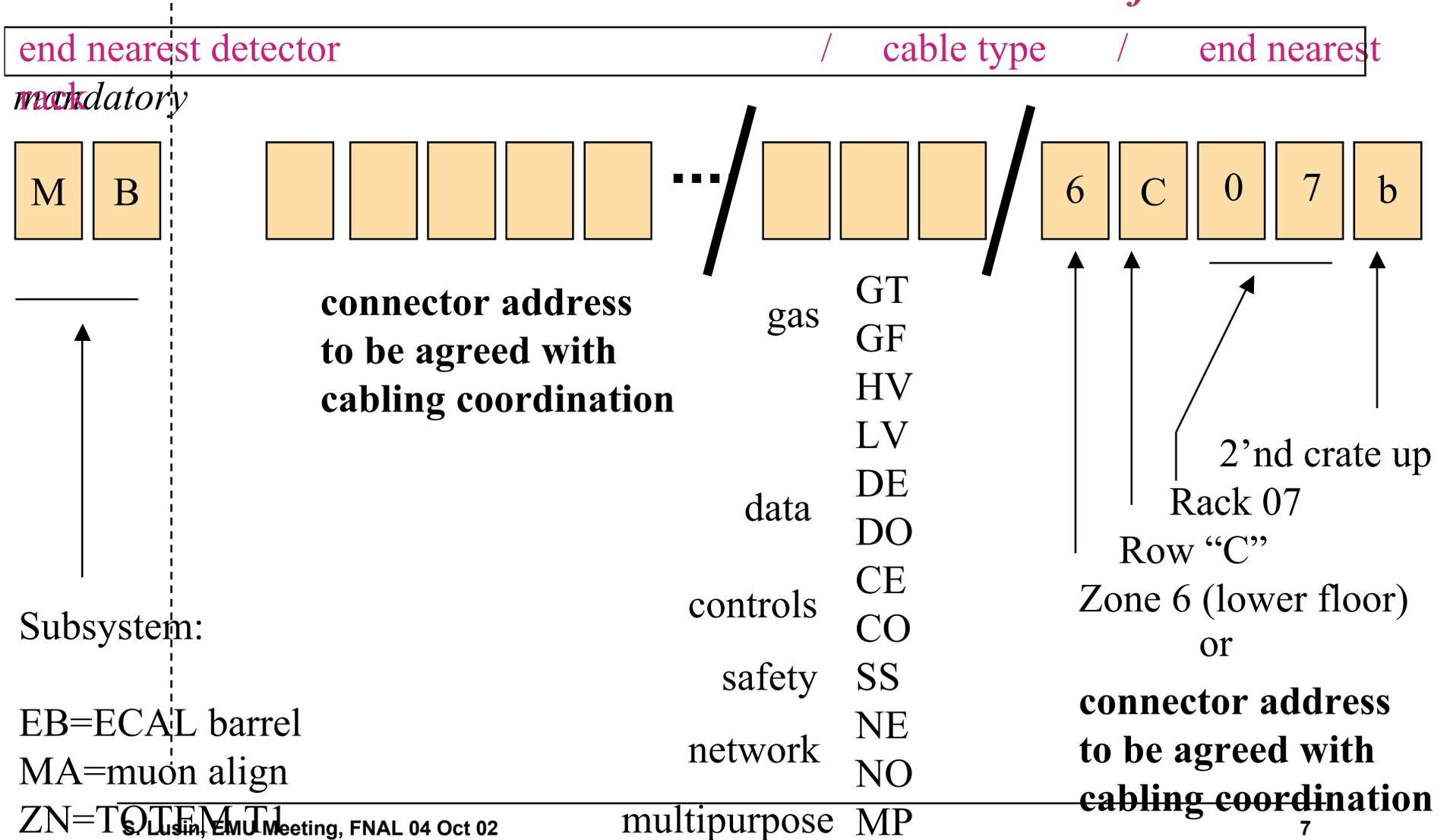
## Example LV supply position ...





# Cable labeling: visual

*-from A. Ball*





# The cabling process ...

**Emphasis in cable labeling discussions has been on label syntax, or constructing the label fields**

- Can imagine many different approaches that may work
- Label fields should be constructed with global detector conventions in mind

**Need to consider how the process of cabling uses the label information**

- Look to prior experience- in this case CDF
  - There is one cable coordinator who is the ultimate authority on what cable actually gets strung
  - Nobody runs a cable on their own
  - The cable coordinator maintains a database of all cable connections
  - The cable coordinator *generates the labels used on the cables*



# Cable documentation ...

## The cable catalog ...

- Maintained by the cabling coordinator
- *Very few* people have write access to the database
- Database allows read access via web

## Pull sheets ...

- Generated by cabling coordinator, given to cable installation technicians
- Describe cable endpoints, possibly routing
- Checked off during cable installation, returned to cabling coordinator for updating database

## Cartoons ...

- Visual descriptions of clustered source and destination points for a group of cables
- Used in tandem with pull sheets

## Cabling Request Form ...

- Given to cabling coordinator
- Describes cable characteristics, endpoints