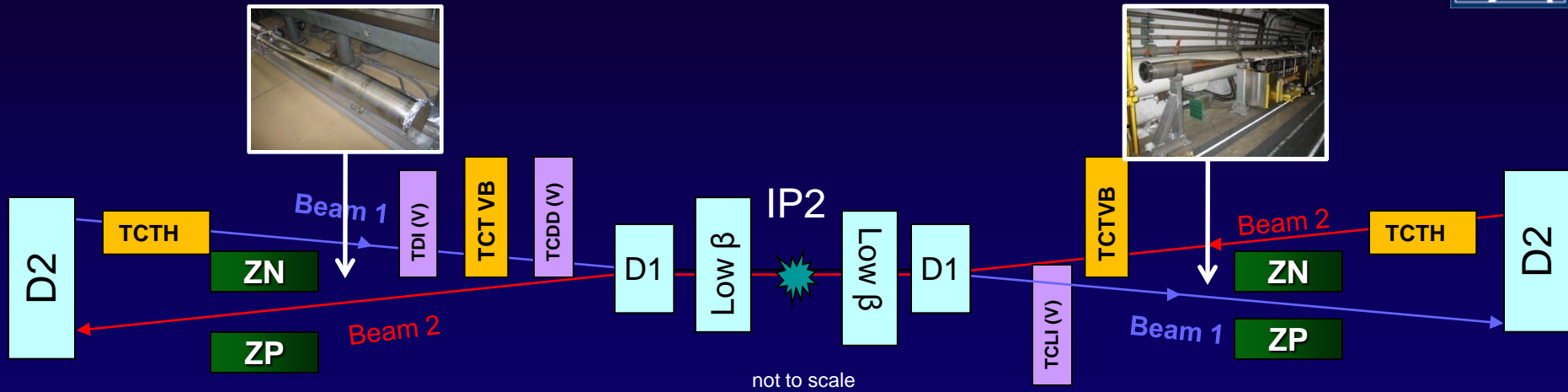




MODIFICATION OF THE LSS2 TO SOLVE THE TCTVB-ZDC INTERFERENCE

D. Macina EN/MEF

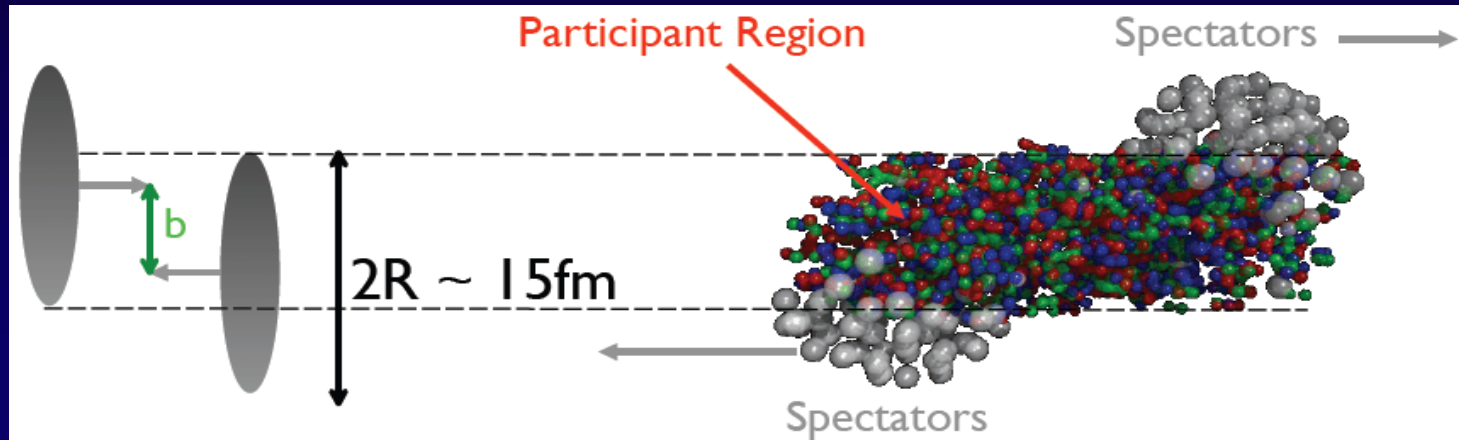
Collimation scheme in IR2



Movable collimators for protection at injection (only vertical plane)

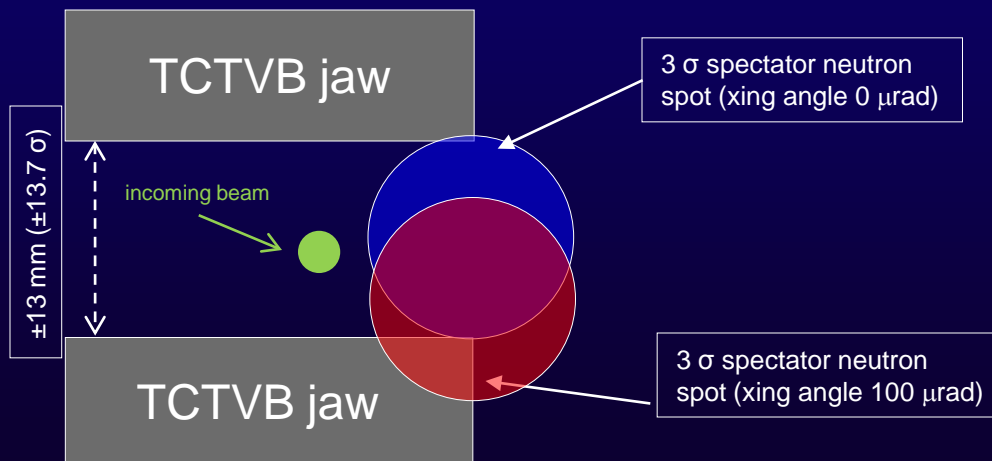
- TCTH (horizontal plane)
- TCTVB (vertical plane).

Interference between the ALICE ZDC signal and the TCTVB

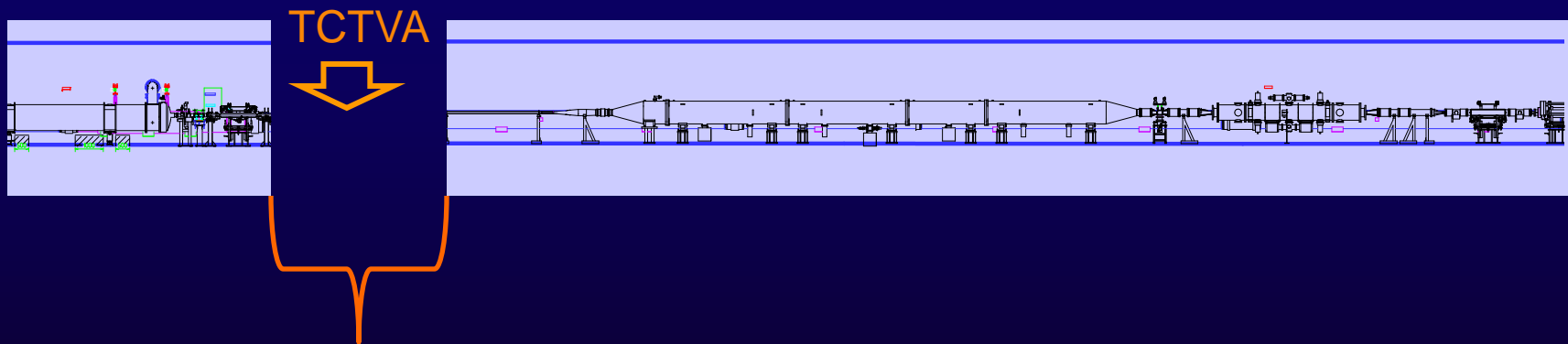
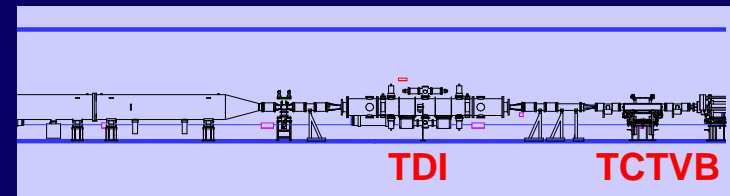
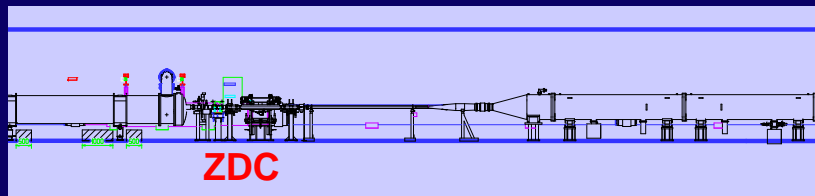
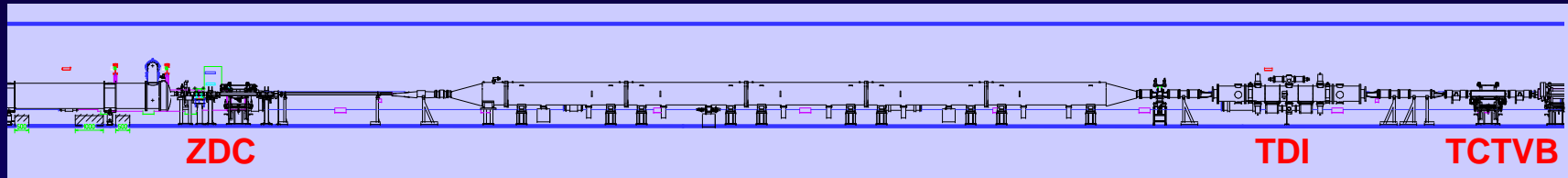


The ZDC will measure the E_{tot} and the centroid of the non-interacting (spectator) nucleons.

Part of the spectator nucleons are intercepted by the TCTVB jaws introducing a systematic error which depends on the machine parameters.



Solution: reproduce the same layout as in IR1/IR5



Displacement Y chamber ≤ 1.36 m (limited by aperture considerations).
Note in preparation (J. Jowett, R. Appleby, J. Uythoven)



Organization

- **EN/MEF coordinates the project and is responsible for the layout change**
- **Collimation working group is responsible for the detailed integration and installation of the TCTVA**
- **In order to proceed toward a ECR we need to know if the integration of the TCTVA in 1.36 m is compatible with the TCT requirements (see presentation from JP Corso, E. Page and O. Aberle)**