PID activities in Bari: CRT Mechanics

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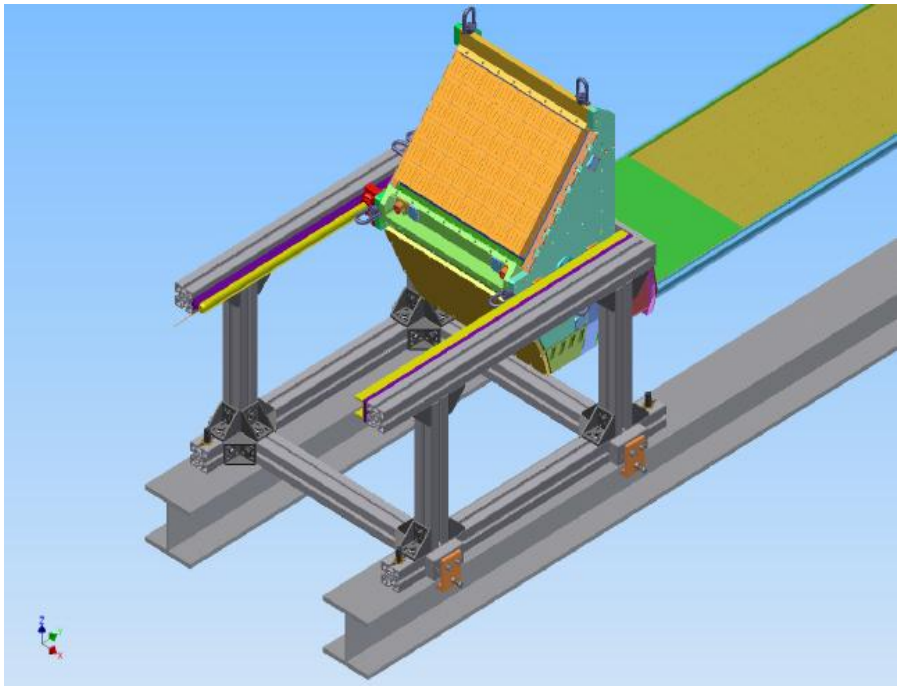
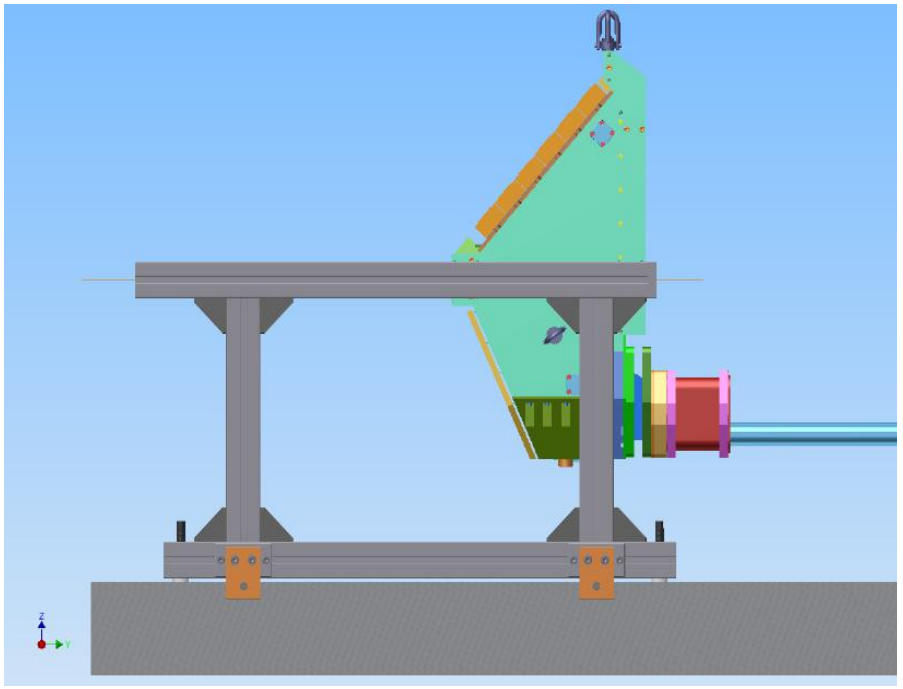
CRT Mechanical Activities

- **CRT FBOX support**
- **FBLOCK + new wedge dummy**

CRT FBOX support

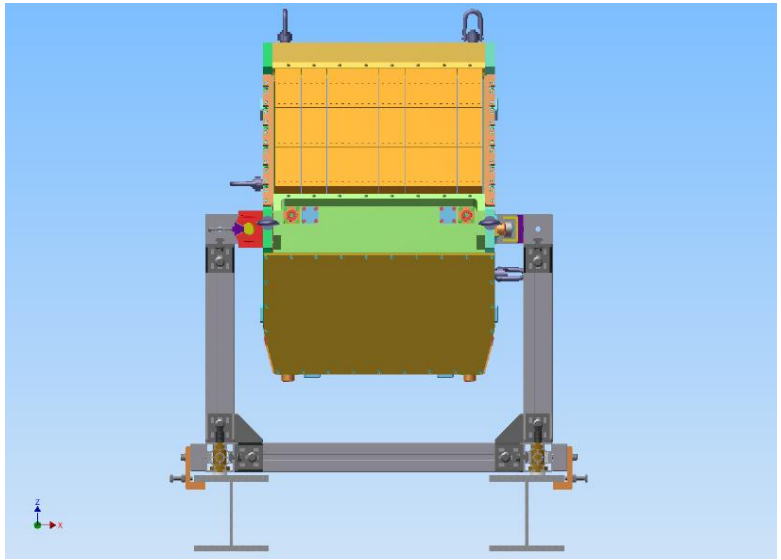
- **The drawings are still in progress**
  - **We propose to use Basic Mechanical Elements (i.e. Bosch Strut profiles) with proper joints**
  - **Some items are still missing (i.e. fine handling of FBLOCK on the support)**

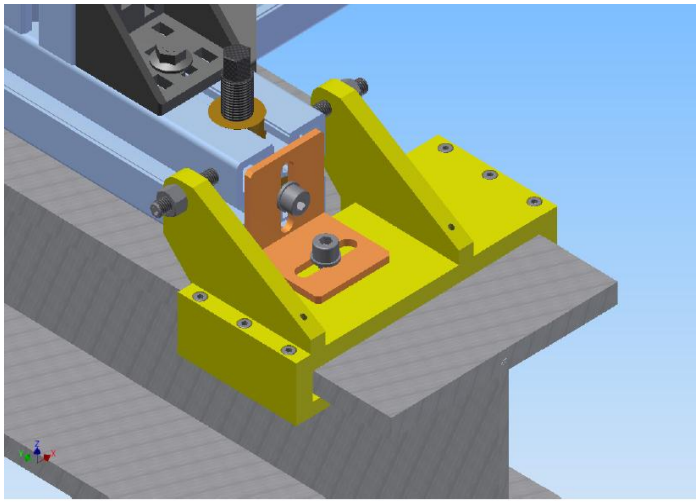


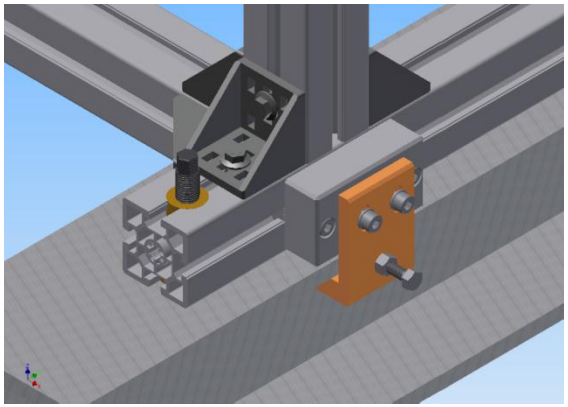


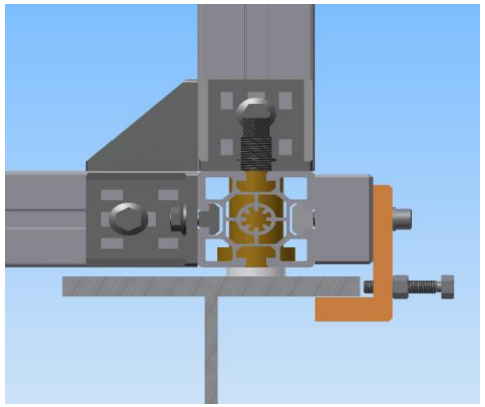
CRT FBOX support (cont'd)

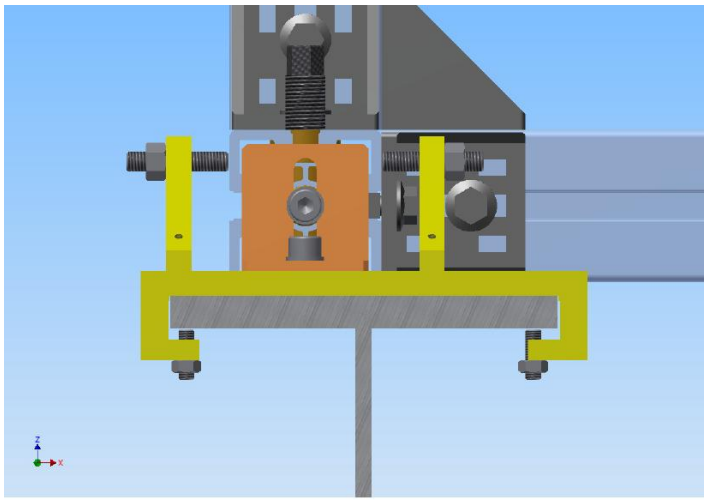
- **Current options to handl the support in 3D**







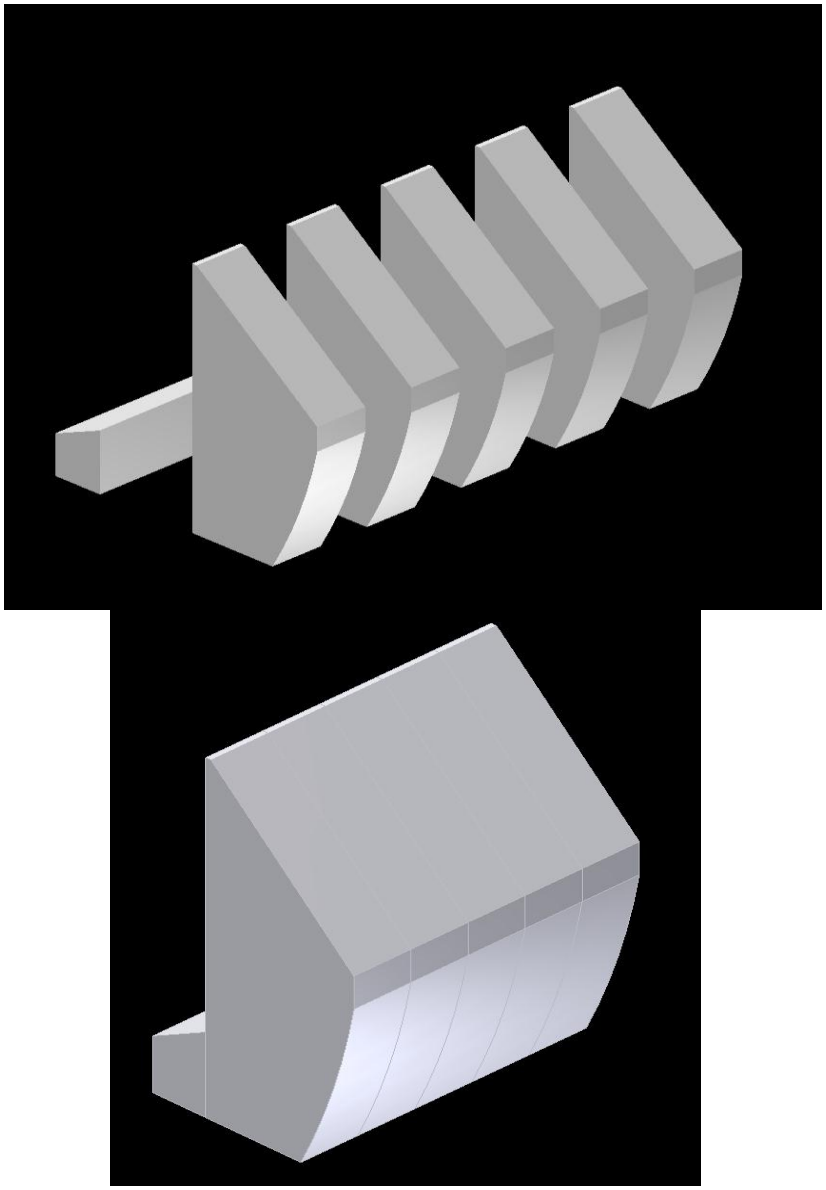




FBLOCK + new wedge dummy

- We have agreed to build a dummy for the FBLOCK and for the new wedge
- The purpose is to simulate all operations to be done with real quartz pieces, to:
  - Check the FBOX
  - Check handling operation and in case develop proper mechanical equipments (e.g. fixture)
  - Check all operations in the clean room
  - Check CRT set-up and align procedure to the bar box
  - Check gluing procedure
  - …
- Of course some of these checks could depend on the working accuracy of the dummy

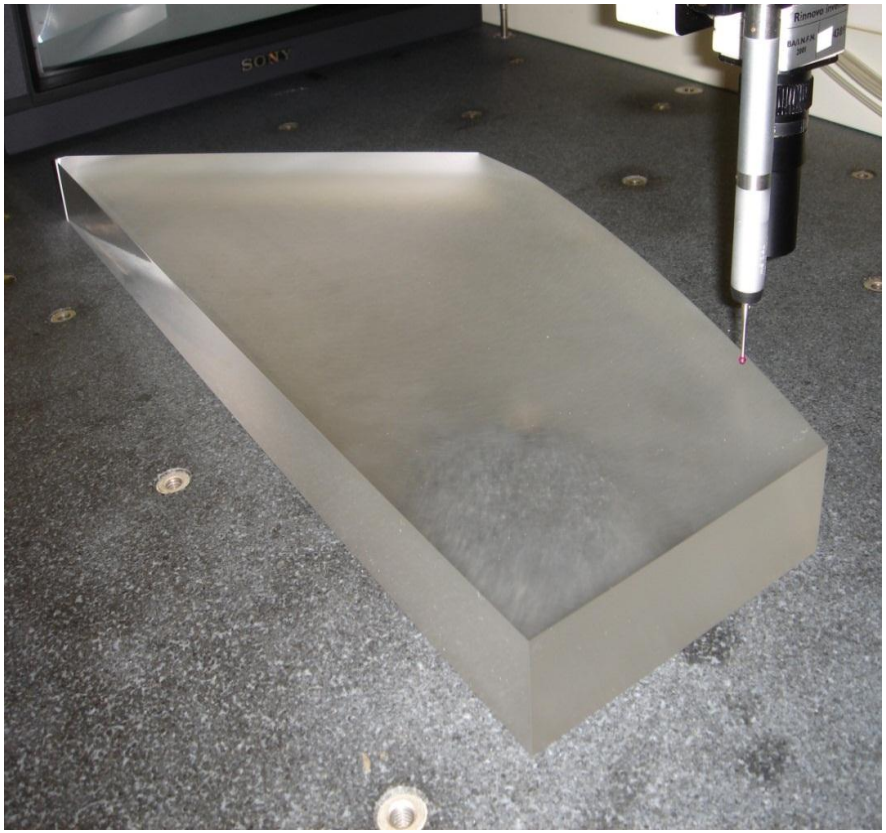
The Dummy Block – current artist view

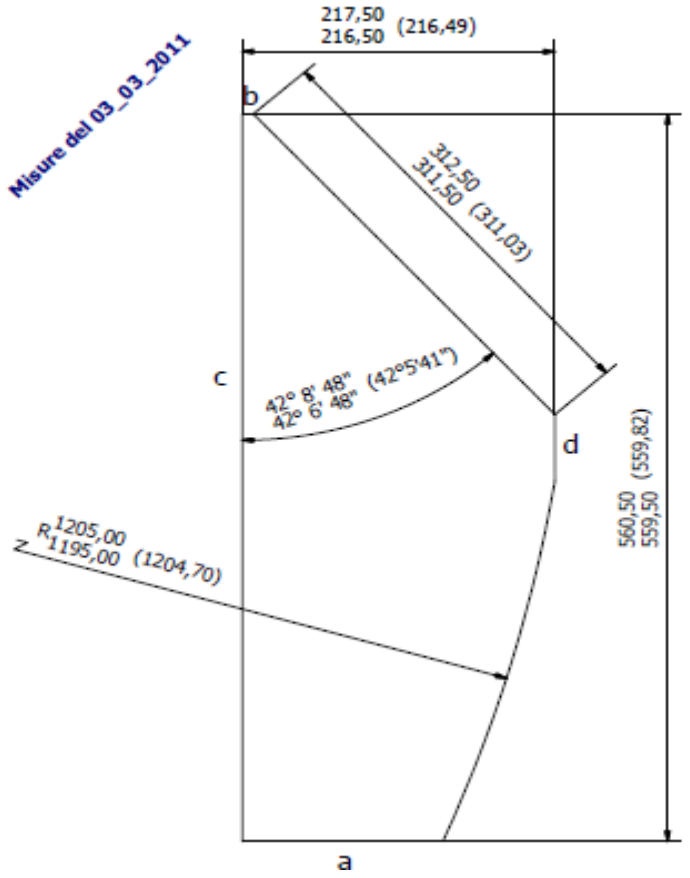


- 5 layers of ~ 85 mm of thickness will be assembled for the dummy FBLOCK
  - We will try to polish the surfaces as well
  - The layers will be glued all together
- The wedge will be also built as single piece and all surfaces will be polished
- All the work is already started in the machine shop in Bari

Dummy production status

- A first prototype has been already built
- A quick dimensional check have been also performed: they are fine enough





Dummy production status (cont'd)

- The 6 pieces (5 for the FBLOCK + 1 for the wedge) have been already cut
- A new mill cutter is needed to move on
  - Next week it should be shipped
- A natural diamond-insert tool is needed for polishing
  - This tool needs to be purchased (we have a quotation in hand)