The new calorimenter in simulation geometry

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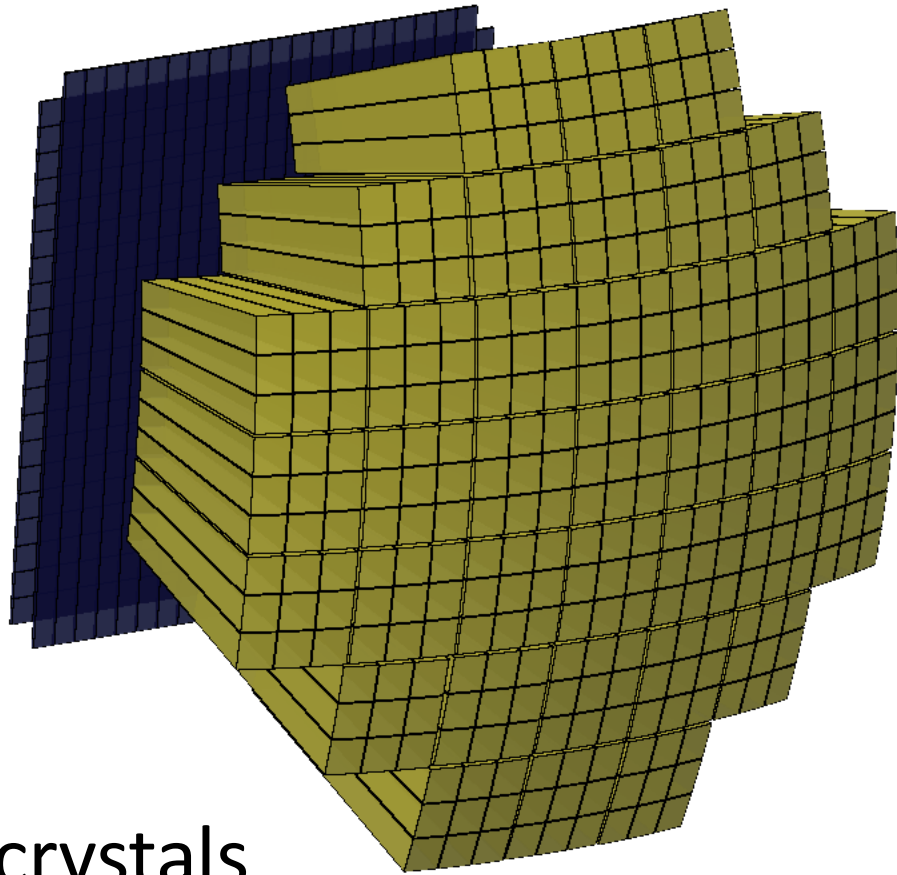
INFN Milano

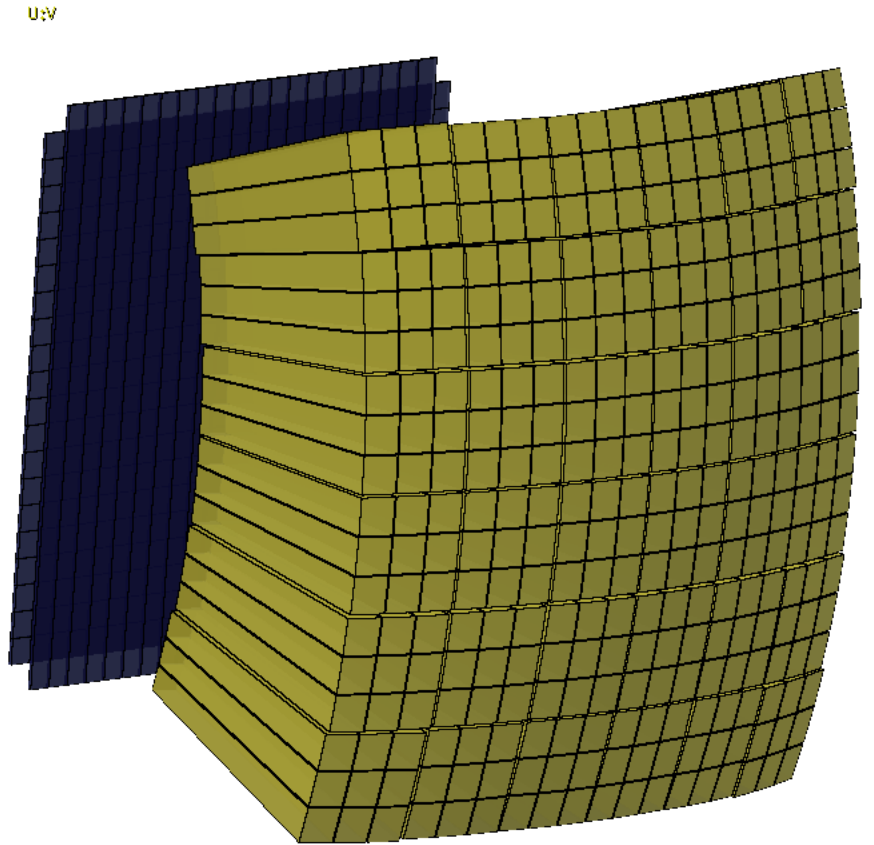*E. Lopez Torres*

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Introduction

- E. Lopez Torres has successfully implemented the implementation of the new geometrical design of the calorimeter
- The necessary software has been uploaded in SHOE newgeom branch:
  - Libraries/TACAbase/TACAparGeo.cxx
  - Reconstruction/macros/BuildCaGeoFileV2.C

Old geometry

New geometry

333 crystals
37 modules

The new design optimizes
matching with TW acceptance

324 crystals
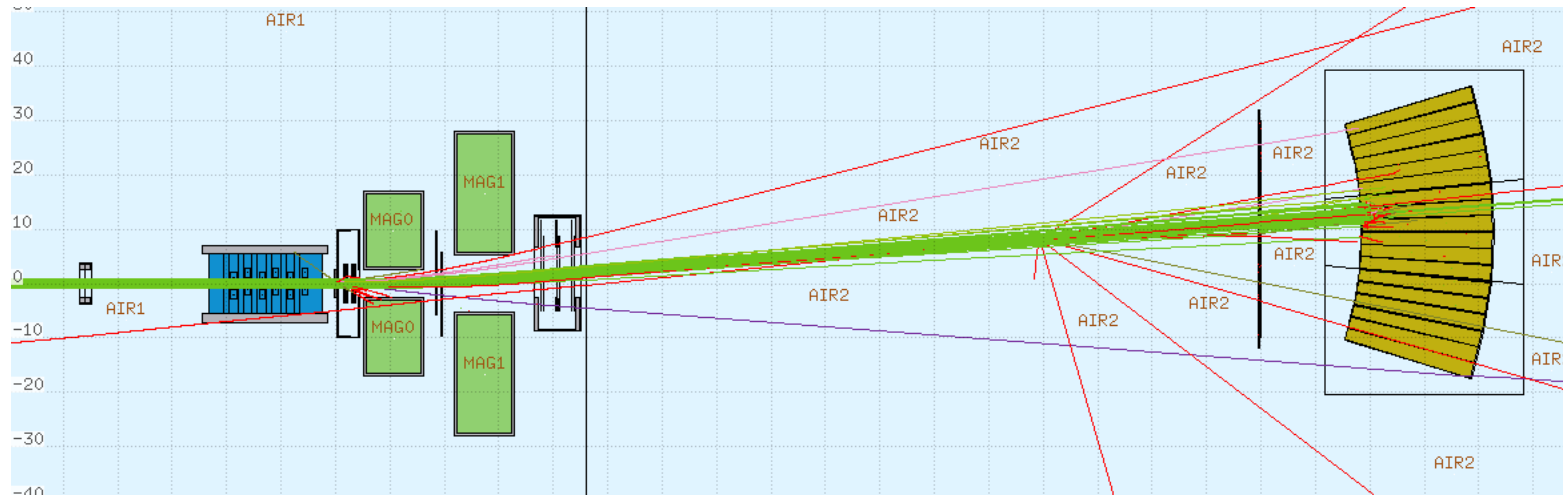36 modules

New mapping of crystals and modules (back view)

Implementation in Simulation

We have initially tested with success the new calo design within the 12CFull_MC campaign

The new geometry design is also simpler from the point of view of codin: there are less subdivisions of the the AIR region, ➜ *but this changes region numbering*

Next steps

- Now we are in the situation of having a new, hopefully final, calorimeter geometry and the experimentally measured magnetic map

- We have 2 options:
  - Commit the new items in the 12CFull_MC campaign
  - Create a new campaign: 12CFull24_MC

- We prefer the solution of implementing a new campaign, to avoid problems to people already using the 12CFull_MC campaign, especially because of the changes in region numbering

- To be approved

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