

Forward Calorimeter LHCal for ILD

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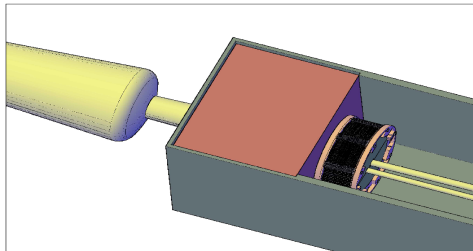
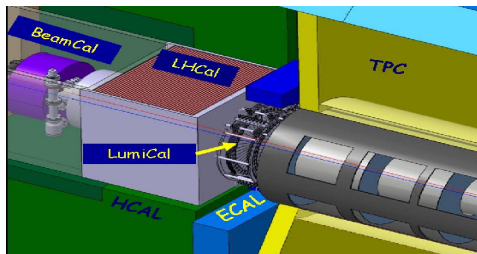
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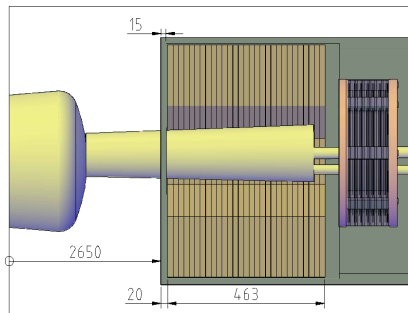
LHCaI at Forward region

- LumiCal
- BeamCal
- LHCaI



Requirements to LHCaI design

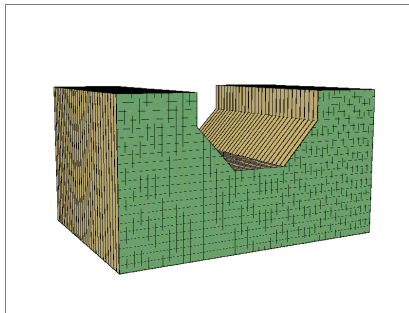
- provide hermeticity
- particle identification
- energy deposition measurement
- compact sandwich calorimeter with silicon sensor and readout electronics the same as LumiCal
- consistent with new $L^* = 4m$



Used software

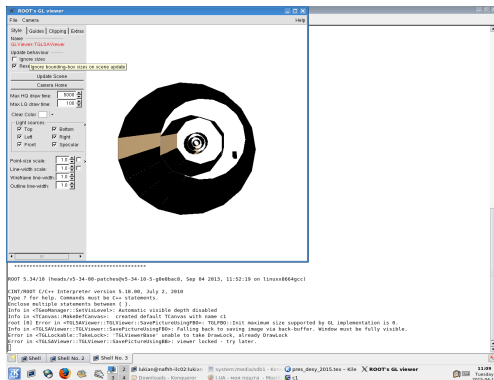
For computer modeling, we are using software **DD4hep**, which provide:

- Full ILD detector description
- The full experiment life cycle
- One single source of detector information
- Ease of use



First step for DD4hep

We have already installed DD4HEP, and now we can run one of the simplest example:



We also have some initial considerations of the LHCaL geometry.

Our achievements and future expectations

- We've understood our task and have learned about unsolved problems in Forward Region, especially about LHCal
- We've already installed useful software, have learned how to work with it

But, LHCal still is a black box, so

- We will continue our work remotely from Kiev
- We will try to modify present model of LHCal to achieve current requirements