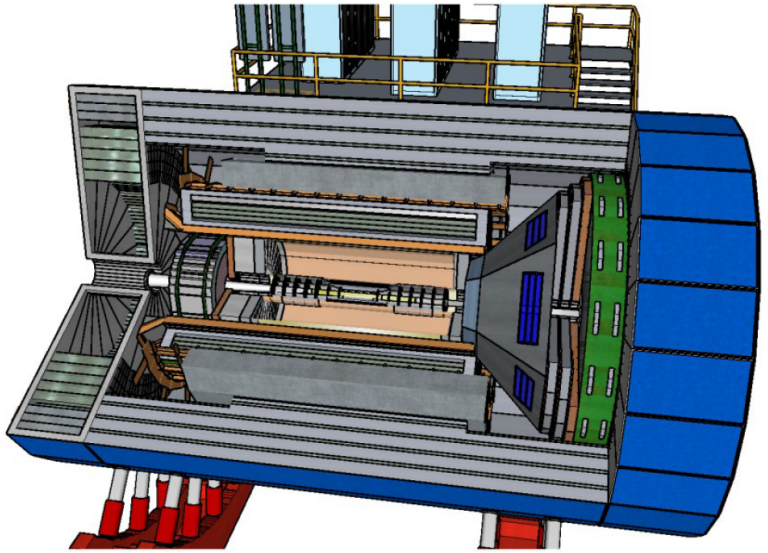
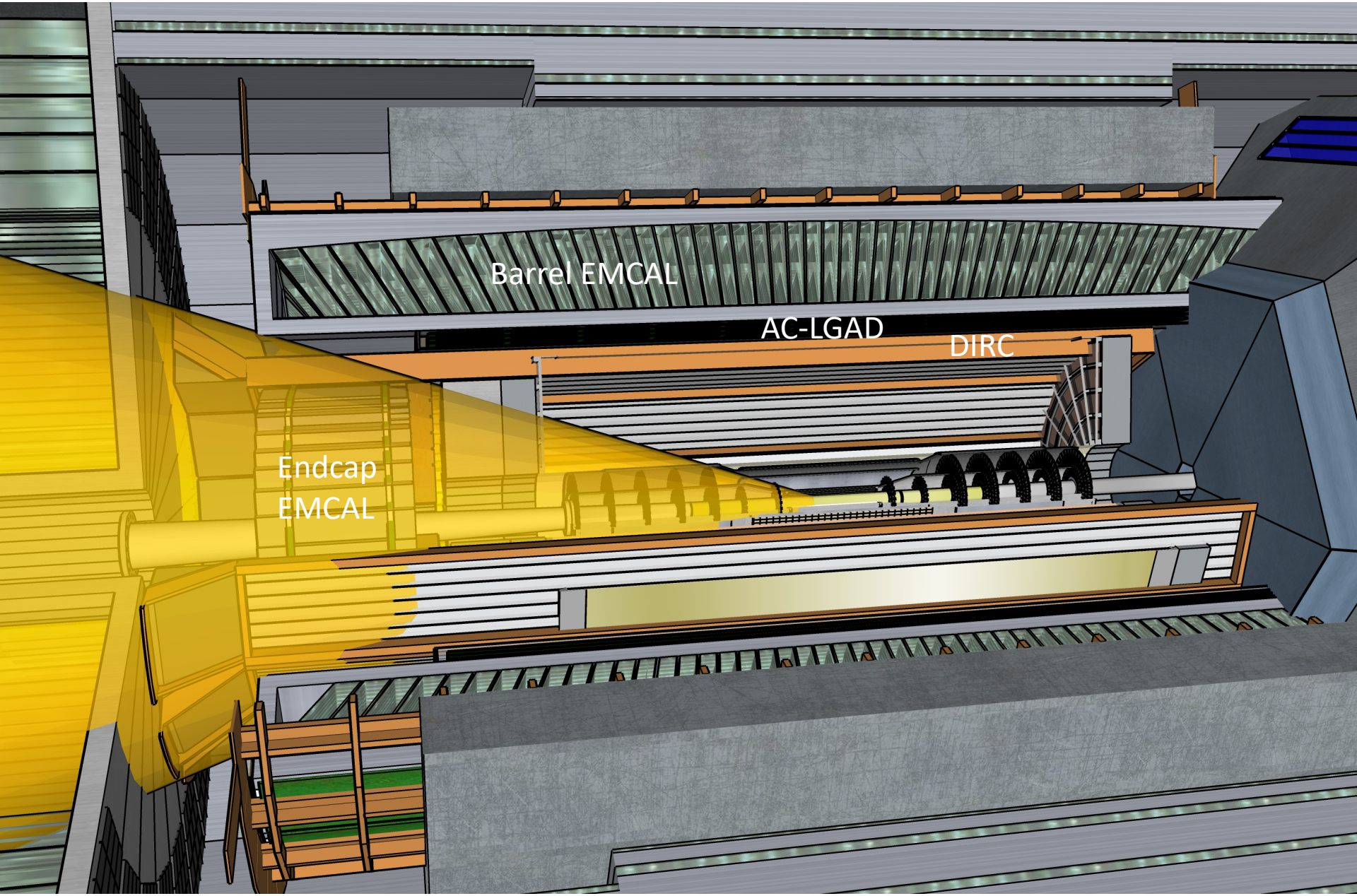
Major items for the ECCE Detector Concept

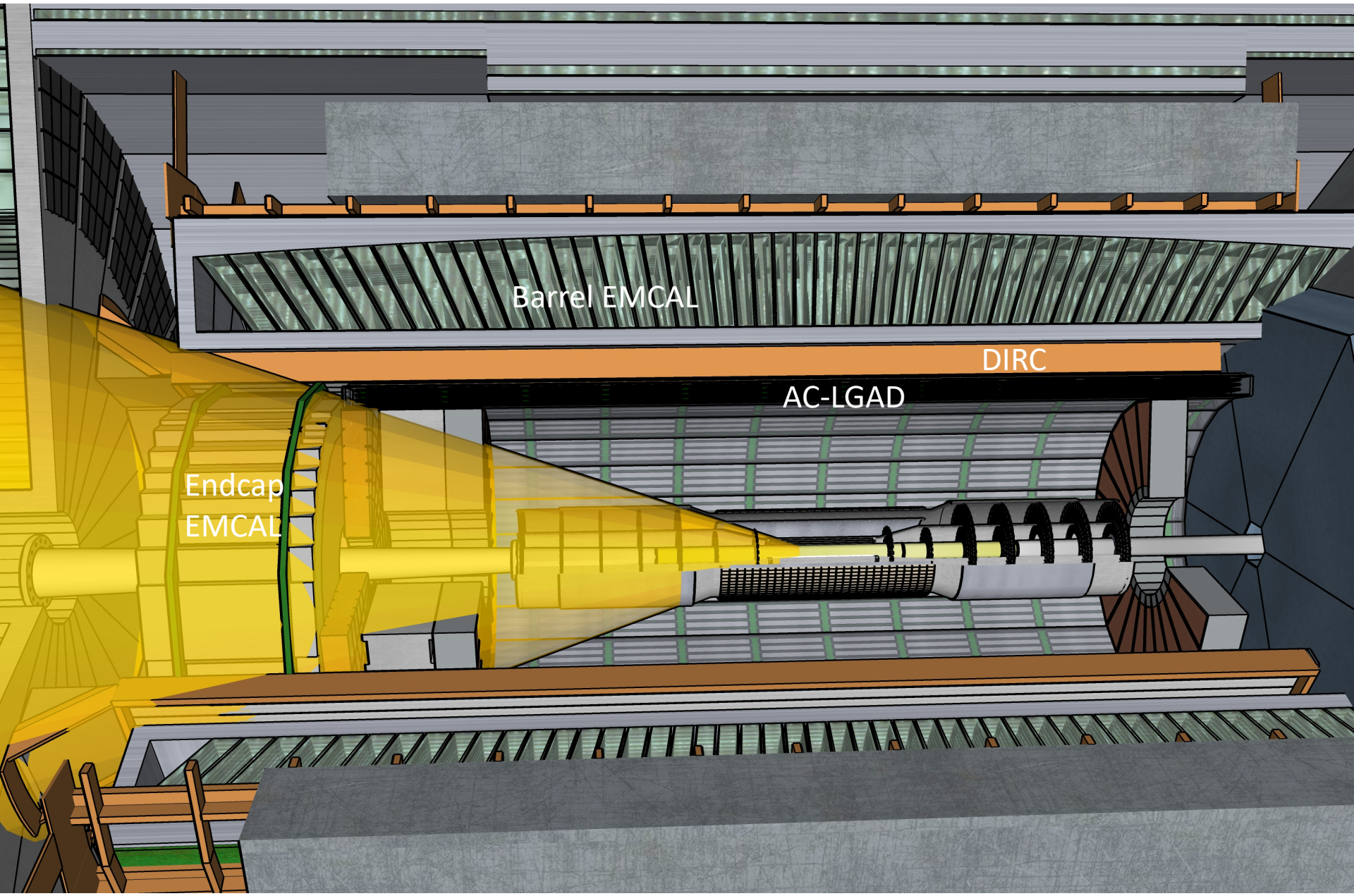
- **Optimization EEEMCal and DIRC**
  - DIRC prism on electron side has advantages for EMCal, DIRC and dRICH
- **Barrel detector configuration**
  - Global optimization to address physics requirement on both e/π and π/K/p; Tracking: best use of space for all Si option
- **Hadron endcap HCAL**
  - Alternative for improved resolution



Potential barrel option that may fulfil requirements and has some flexibility

System	Function	Thickness	Inner Radius	Outer Radius
All Silicon	Vertex/Tracking	47		51
AC-LGAD	Tracking/timing	8	51	59
Inner support for DIRC, EEEMCal		10	59	69
DIRC	PID	3.5	69	72.7
Outer support DIRC, EEEMCal		3.5	72.5	76
TOF/AC-LGAD	Timing/tracking	8	76	84
Barrel EMCal	EMCal, e/π separation	50	84	134
Support for barrel EMCal		6	134	140


Barrel EMCAL
AC-LGAD
DIRC
Endcap
EMCAL


Barrel EMCAL
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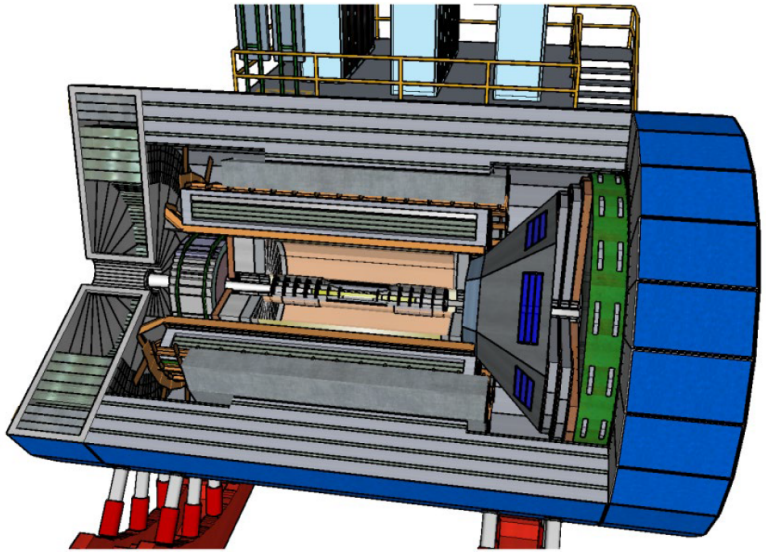

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Several options. Questions next page

Questions for updated configuration

- Is there a benefit for having more AC-LGAD layers before the DIRC?
  - If so, DIRC would move outward accordingly

- If no benefit of additional AC-LGAD layers before the DIRC, space could be used for the barrel EMCal
  - In this case DIRC would stay where it is radially