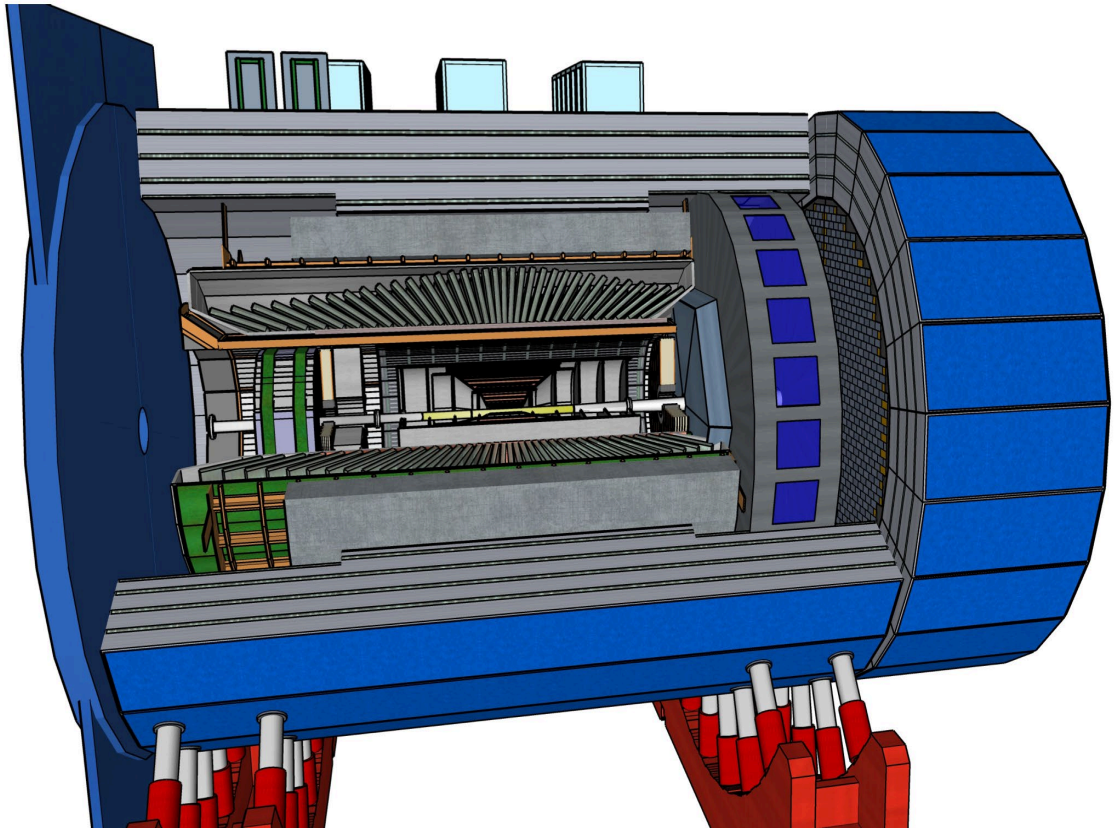
EIC Comprehensive Chromodynamics Experiment



Summary

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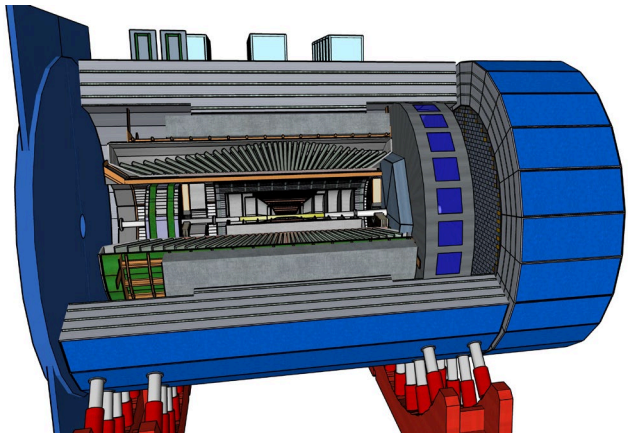

- ❑ The ECCE detector is a physics-driven balance of
  - the reuse of equipment
  - the use of mature detector technologies, and
  - the use of detector technologies that are at the near-end of an extensive R&D effort
- ❑ The ECCE detector is highly integrated with the interaction region.
  - This led to several detector technologies with multi-purpose use, and use of AI to optimize detector choices, locations, and materials.
  - The vision to use streaming readout with multiple detector technologies and to be compatible with AI/ML led to integration of detector with electronics and computing.
- ❑ The ECCE detector can be ready at early CD-4A!
- ❑ The ECCE detector can do the EIC white paper and NAS science, and more!

Summary (cont.)

- ❑ The ECCE collaboration is strong, capable and ready to build the ECCE detector and exploit the science potential of the EIC
- ❑ The ECCE collaboration represents a diverse and worldwide community, including five continents and many early-career scientists.
- ❑ We have a detailed and realistic project that demonstrates a path for producing an on-time on-budget project detector by early CD-4A
- ❑ We are engaged in a focused detector R&D plan and clear understanding of risks and opportunities to not only build the detector but upgrade its capabilities in the future

Next Steps…

We are well-prepared to move forward:

- ❑ Collaboration formation meeting:
  - ○ Build on ECCE consortium, while being inclusive to new collaborators.
  - ○ Form IB and bylaws committee,
  - ○ Formalize leadership structure and fill selected positions.
- ❑ Integrate with the EIC project:
  - ○ Customize project plan for ECCE to facilitate CD-2 review,
  - ○ Integrate with the EIC project and customize R&D plan,
  - ○ Work with project to prioritize efforts and resources.
- ❑ Further engage with our international partners:
  - ○ Take next steps to realize potential in-kind contributions,
  - ○ ECCE collaboration meetings in Asia, Europe.

The ECCE collaboration is strong, capable and ready to build the ECCE detector and exploit the science potential of the EIC