

Postdoc for Silicon Tracker

Ad link:

https://indico.cern.ch/event/1467014/contributions/6242833/attachments/2975001/5236775/IHEP_LHCb2024.pdf

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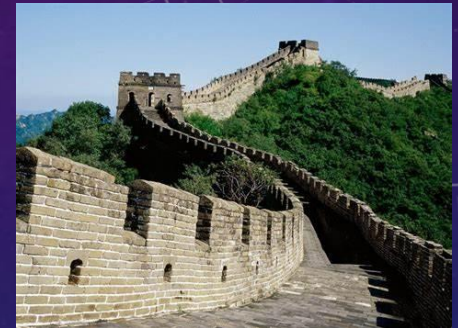
The successful candidates are expected to either play a leading role in MAPS silicon detector R&D for LHCb phase II upgrade and future e-e collider , and/or work on physics analyses with LHCb data. The physics analyses topics could be on but not limited to the searches and studies of exotic heavy hadron states or CKM parameter measurements, and the silicon detector R&D topics including electronic system design, detector prototypes & components tests in the local lab, and system-level studies for future detectors. Relevant experiences such as LHCb software development, detector development and operation, trigger and DAQ electronics design, and FPGA programming will be highly considered.



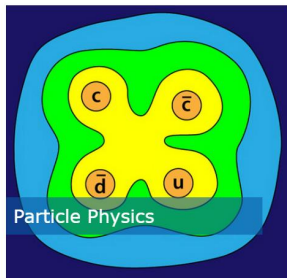
IHEP, Beijing, China

<http://english.ihep.cas.cn/>

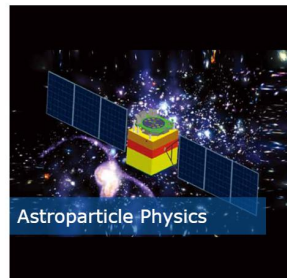
- The Institute of High Energy Physics (IHEP), a Chinese Academy of Sciences research institute, is China's biggest laboratory for the study of particle physics
- over 1400 full-time staff, as well as over 500 postdocs and graduate students
- BES3, ATLAS, CMS, LHCb, AMS, JUNO, ...



Accelerator Technology and Science



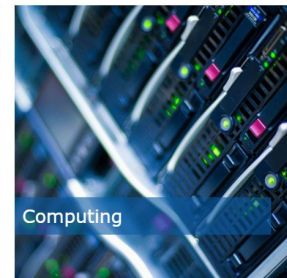
Particle Physics



Astroparticle Physics



Multi-Disciplinary Research



Computing



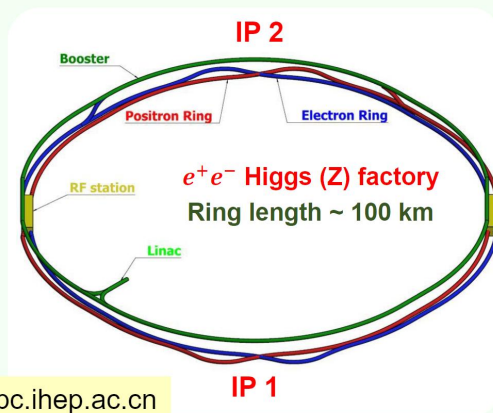
Technology Transfer

LHCb + CEPC

- Flavor physics
- silicon tracker for LHCb and CEPC

CEPC The Circular Electron Positron Collider

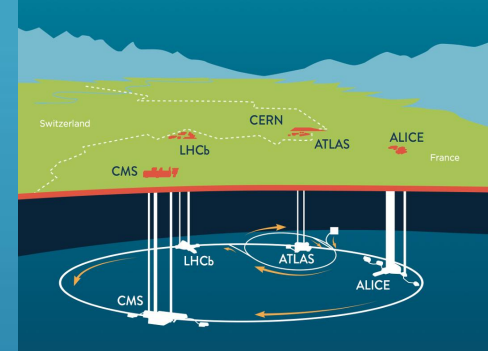
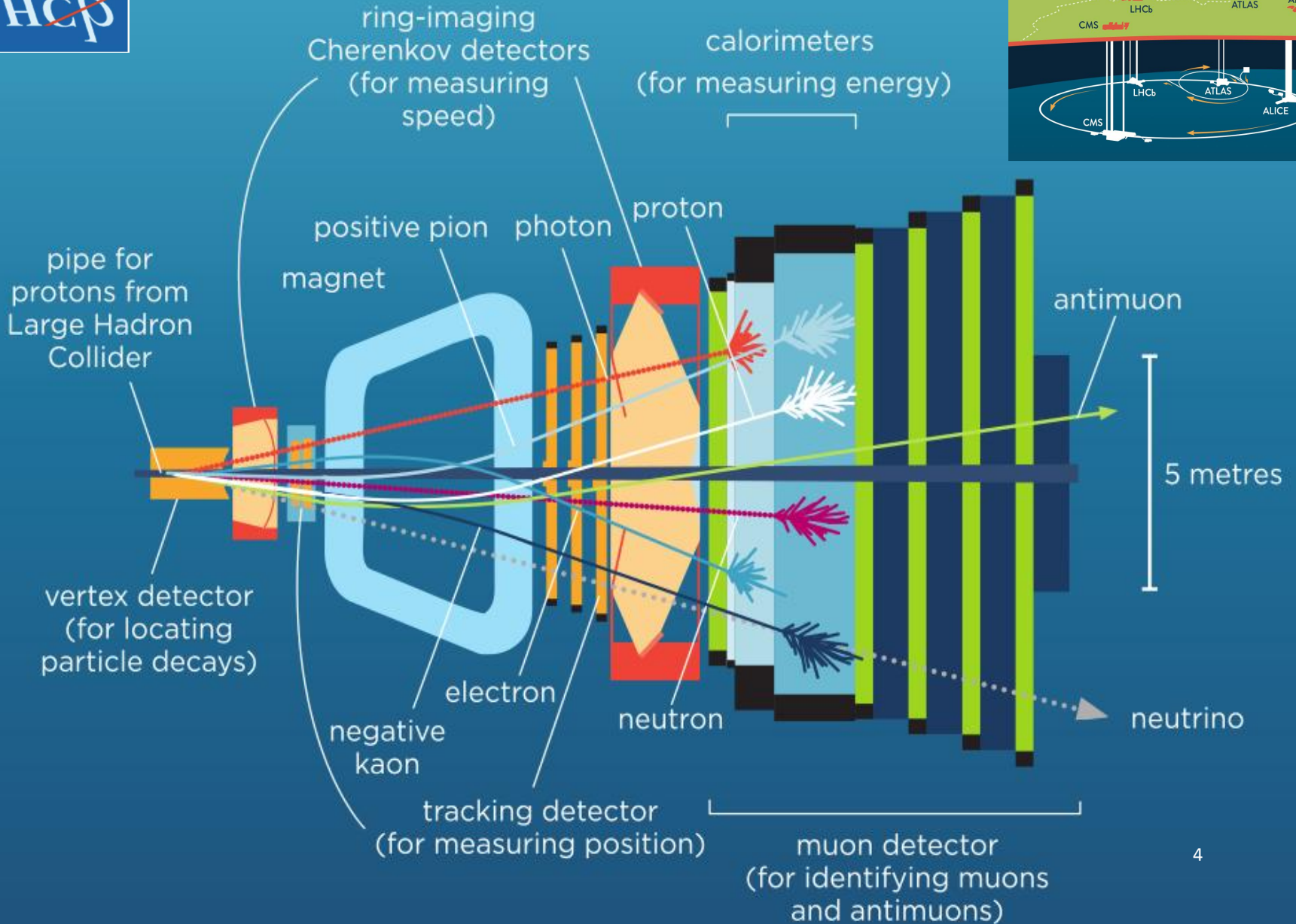
- ❑ The CEPC was proposed in 2012 right after the Higgs discovery. It aims to start operation in 2030s, as an e^+e^- Higgs / Z factory.
- ❑ To produce Higgs / W / Z / top for high precision Higgs, EW measurements, studies of flavor physics & QCD, and probes of physics BSM.
- ❑ It is possible to upgrade to a pp collider (SppC) of $\sqrt{s} \sim 100$ TeV in the future.



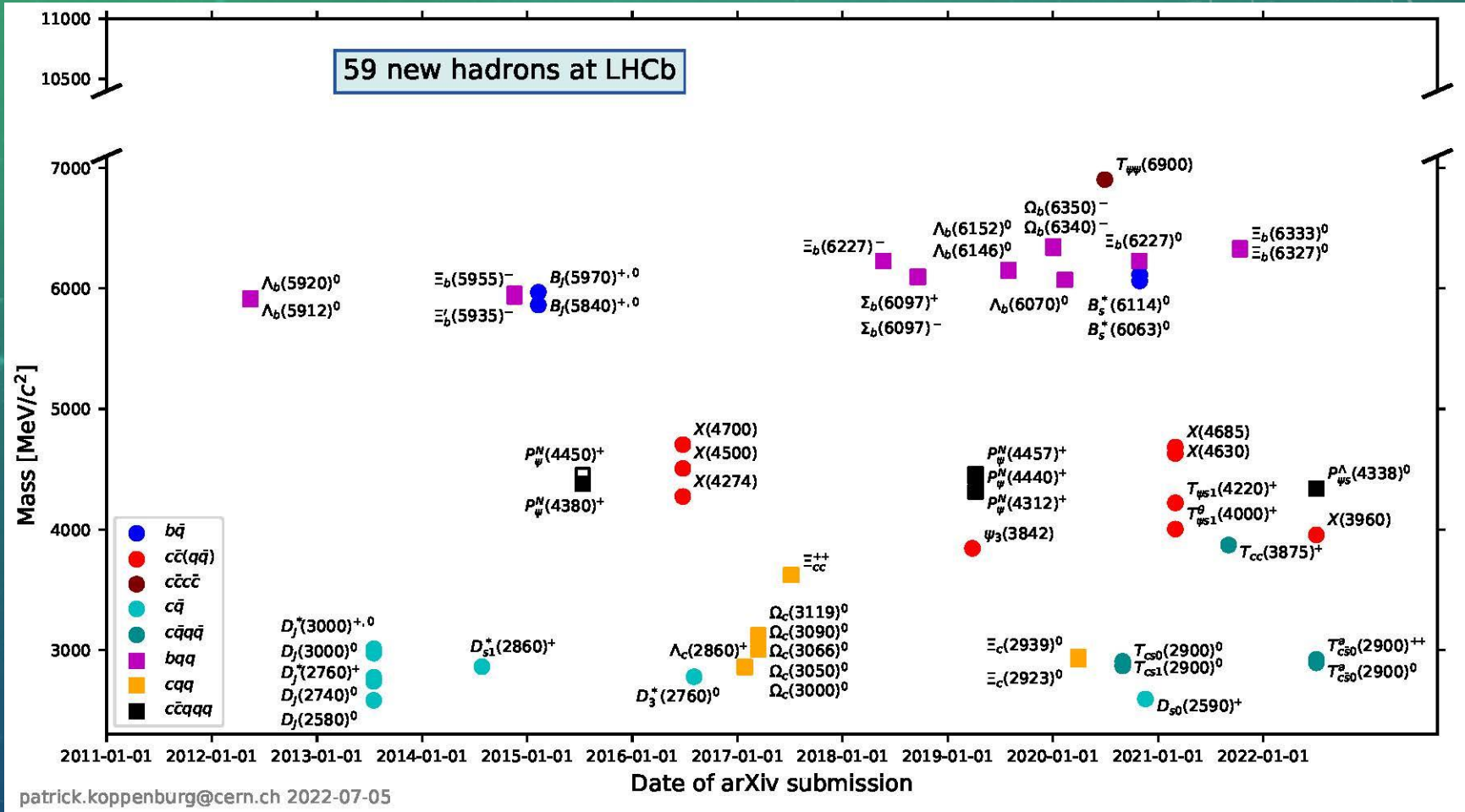
<http://cepc.ihep.ac.cn>



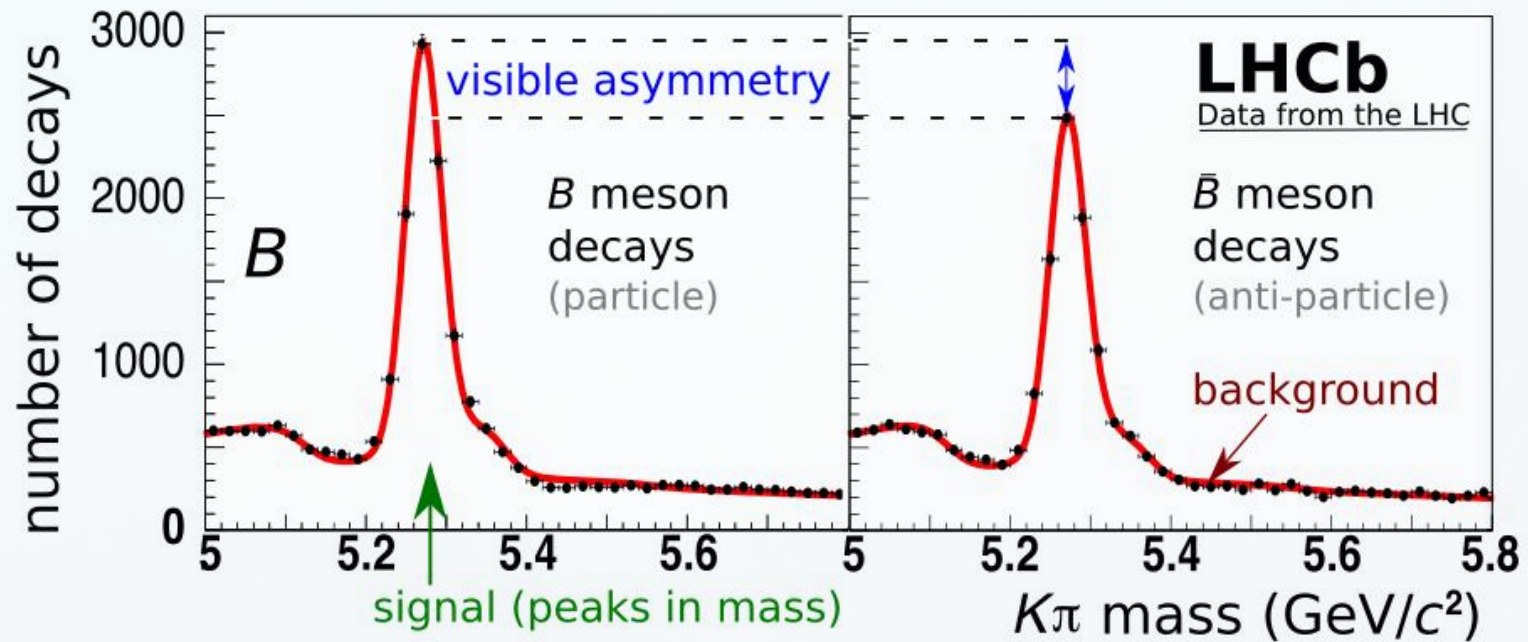
10/26/2024



New Hadrons

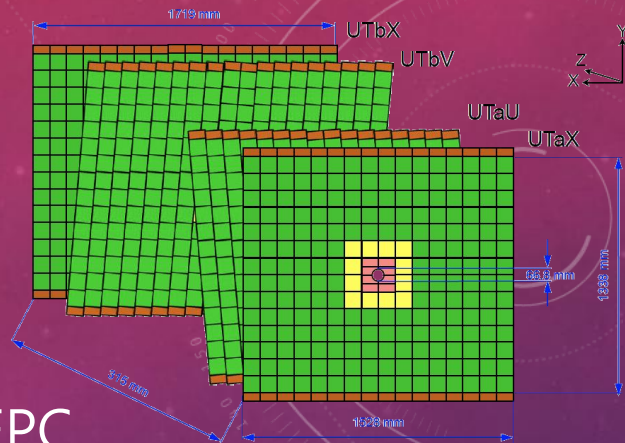


CKM, CPV

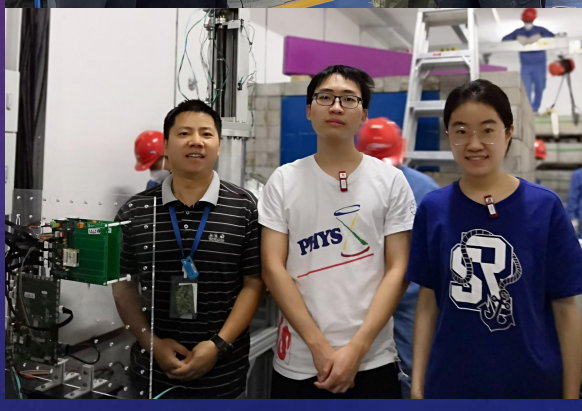
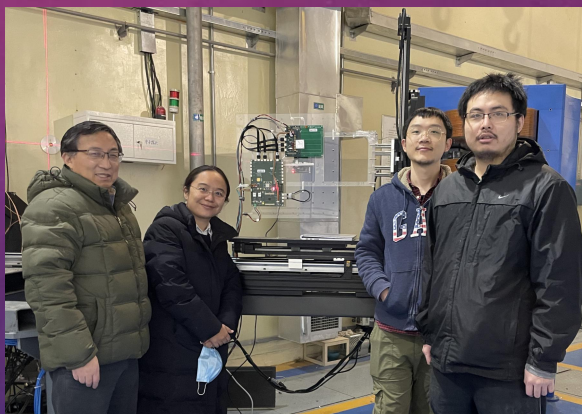
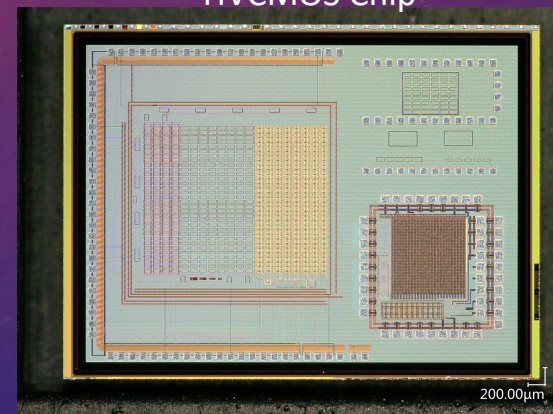


LHCb Upstream Tracker

- silicon strip tracker for LHCb phase I
- silicon pixel tracker for LHCb phase II and CEPC

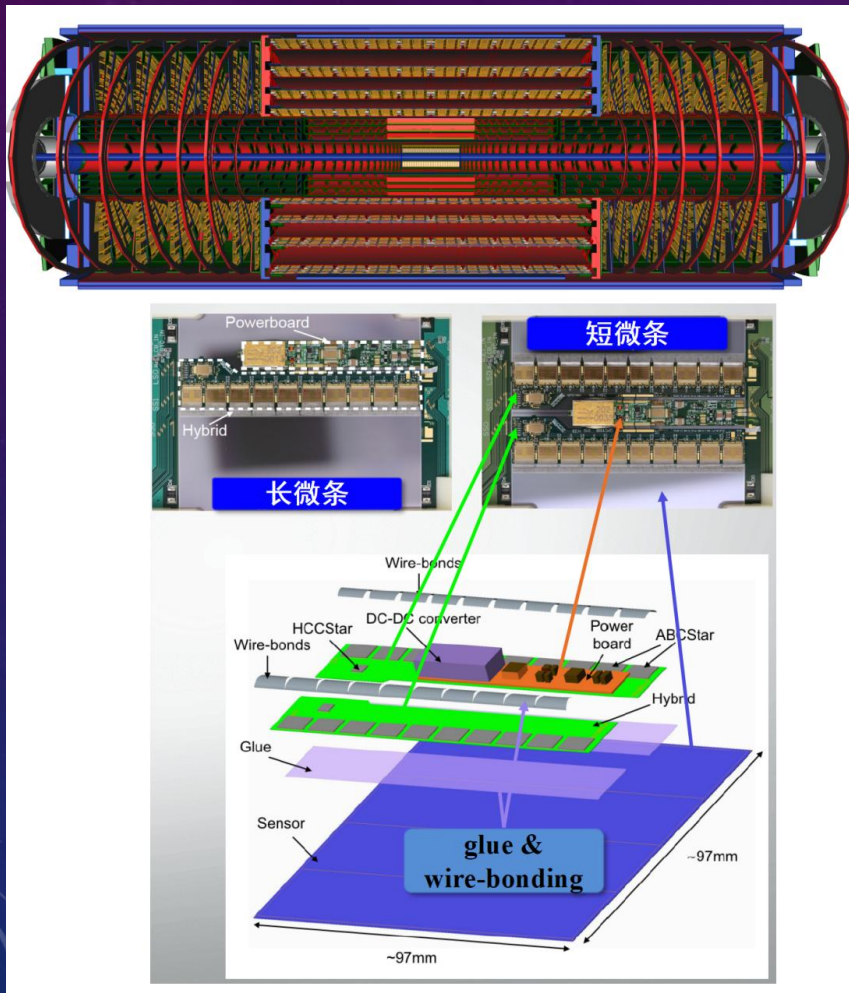


COFFEE2
HVMOS Chip



Other Silicon Detector Projects

ATLAS Phase2 ITk Strip



ATLAS Phase2 ITk Strip

