Introductory remarks

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中国科学院高能物理研究所

Institute of High Energy Physics Chinese Academy of Sciences



CEPC-related Events

US mini virtual workshop on future electron-positron colliders: zoom only

- Video-only event:
 - US mini workshop on future e+e- colliders
 - April 22, 10:00 pm Beijing time
 - https://indico.cern.ch/event/896263/
- Snowmass process starting, we will organize CEPC participation

CEPC MDI Workshop, May 28-19

- https://indico.ihep.ac.cn/event/11801/
- CEPC international workshop on Oct. 26-28, 2020
 - Meeting will be in Shanghai this year. Organization has started.

Next CEPC Work Day: May 8

- Cover calorimeter R&D
- Software status
- CEPC R&D project plans

Joao Guimaraes da Costa

Recommendations:

1. The project leadership and IDRC should assemble a coherent list of R&D activities, such that the presence of gaps and overlaps can be determined and addressed

- 2. Each current R&D project should provide, before the end of 2019, key information to the IDRC:
 - The objectives of the project
 - •The anticipated schedule on which the objectives will be met
 - •The funding available to the project, and the leadership arrangements within it
 - The extent to which the project is a CEPC-specific development

We added:

• Manpower resources available for the project, including type (student, faculty, engineer, etc) and FTE

Detector R&D Tasks Arrangement

- 1 Vertex
- 2 Tracker
- 2.1 TPC
- 2.2 Silicon Tracker
- 2.3 Drift Chamber
- 3 Calorimeter
- 3.1 ECAL Calorimeter
- 3.2 HCAL Calorimeter
- 3.3 DR Calorimeter
- 4 Muon Detector
- 5 Solenoid
- 6 MDI
- **7 TDAQ**
- 8 Software and Computing

Detector R&D sub-projects to be identified and numbered accordingly

R&D tasks to be created under these tasks

e.g. 3.1.1 Crystal Calorimeter

Sub-group conveners and other detector R&D proponents were asked to compile documents with required information

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- 1-Ouyang-IDRC_info_vertex_collected.docx
- 1.1-RD-Vertex-Prototype
- 2.1-RD-Tracker-TPC-v1.docx
- 2.2-RD-Tracker-SiliconTracker-Prototype-v1.docx
- 2.3-RD-Tracker-DriftChamber-v1.docx
- 3.1.1-RD-ECAL-Crystal_Calorimeter-v1.1.docx
- 3.2-RD-HCAL-PFA-DHCAL-v0.docx
- 3.3-RD-calorimetry-dual-readout-calorimeter-v1.docx
- 4.1-RD_Muon_Scintillator-v1.docx
- 4.2-RD-muRwell-detectors.docx
- 5.1-RD-LTS-solenoid-magnet.docx
- 5.2-RD-HTS-solenoid-magnet.docx
- 8 Software and Computing

Word document template:

CEPC Detector R&D Project 1.1 Vertex Prototype

Document Responsible:	Joao Guimaraes da Costa
Last saved by on	12/13/19 5:19:00 AM
Revision number:	1

Change history

Revision	When	What changed and why
1	12/12/2019	First draft
		< Add further lines to table as required >

Readme first

- i. Please do not delete or modify this section or its structure.
- ii. Only change text enclosed by (and including) angled brackets "< ... >".
- iii. Don't change field directly, instead modify the document options, under File→ Properties (or similar)
 - Enter name of person that wrote the document in Document:Summary: Author
 - The project ID number, should follow the rules provided to you earlier. The number should be changed in <u>Document:Custom</u>: PBS.
 - The project name should be changed in Document; Summary: Subject.
- iv. In Section <u>Project Objectives</u> provide a brief description of the project goals, i.e. why and what is being produced, for PBS item 1.1 Vertex Prototype. If this project includes identifiable subprojects you can indicate them in the <u>Sub-projects Description</u> Section, otherwise submit a separate document for each of them. The sub-project IDs are free for you to define.
- v. Finally, remember to update the *Change History*.

Preliminary Documents:

12 preliminary documents so far

CEPC Detector R&D Project 2.1 TPC Module and Prototype

Document Responsible:	Qihurong
Last saved by on	12/18/19 6:40:00 AM
Revision number:	1

2.2 Silicon Tracker Prototype

CEPC Detector R&D Project

Document Responsible:	Harald Fox, Meng Wang
Last saved by on	12/29/19 10:42:00 AM
Revision number:	1

CEPC Detector R&D Project 3.1.1 Crystal Calorimeter

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	Document Responsible:	Yong Liu	
	Last saved by Yong Liu on	12/30/19 5:56:00 AM	
	Revision number:	1	

CEPC Detector R&D Project 3.3 Dual-readout Calorimeter

Document Responsible:	Roberto Ferrari
Last saved by Roberto Ferrari on	17/12/19 08:00:00 PM
Revision number:	1

CEPC Detector R&D Project 4.1 Scintillator-based Muon Detector Prototype

Document Responsible:	Xiaolong Wang, Liang Li
Last saved by on	12/18/19 3:15:00 AM
Revision number:	1

CEPC Detector R&D Project 4.2 muRWell detectors

Document Responsible:	Paolo Giacomelli
Last saved by Joao Guimaraes da Costa on	12/30/19 12:23:00 AM
Revision number:	1

CEPC Detector R&D Project 5.1 LTS solenoid magnet

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	Document Responsible:	Zhu Zian
	Last saved by on	12/18/19 1:40:00 AM
	Revision number:	1

CEPC Detector R&D Project 5.2 HTS solenoid magnet

Document Responsible:	Zhu Zian
Last saved by on	12/18/19 1:41:00 AM
Revision number:	1

CEPC Detector R&D Project 6.2 Interaction Region Mechanics

Document Responsible:	Microsoft Office User
Last saved by on	12/18/19 11:08:00 AM
Revision number:	1

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- 1) Collect missing documents before May 8
- 2) Report at CEPC Day/Steering Group
 - 2) Compile into one single document and provide to detector R&D committee
- 3) Discuss with committee next steps, including proposal submission procedure