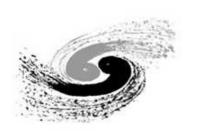
CEPC Detector R&D Projects

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May 06, 2020



中国科学院高能物理研究所

Institute of High Energy Physics Chinese Academy of Sciences

Our Mission:

- 1. Produce coherent list of Detector R&D activities
 - Help Determine the presence of gaps and overlaps
- 2. Each current CEPC-related R&D project should provide, 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
 - Manpower needs
- 3. This is the beginning of the process, not the end.

- 1) Collect missing documents before May 8
- 2) Report at CEPC Day/Steering Group

Detector R&D Tasks Arrangement

1. Vertex

- 1.1. Pixel Vertex Prototype
- 1.2. ARCADIA/LFoundry CMOS

2. Tracker

- 2.1. TPC
- 2.2. Silicon Tracker
- 2.3. Drift Chamber

3. Calorimeter

- 3.1.ECAL Calorimeter
 - 3.1.1. Crystal Calorimeter
 - 3.1.2. Scintillator-Tungsten
- 3.2. HCAL PFA Calorimeter
 - 3.2.1. DHCAL
 - 3.2.2. Sci AHCAL
- 3.3. DR Calorimeter

4. Muon Detectors

- 4.1. Muon Scintillator Detector
- 4.2. Muon and pre-shower MuRWell Detectors

5. Solenoid

- 5.1. LTS Solenoid
- 5.2. HTS Solenoid

6. MDI

- 6.1. LumiCal Prototype
- 6.2. Mechanics
- 7. Software and Computing
- 8. TDAQ

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

Status:

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Status and actions

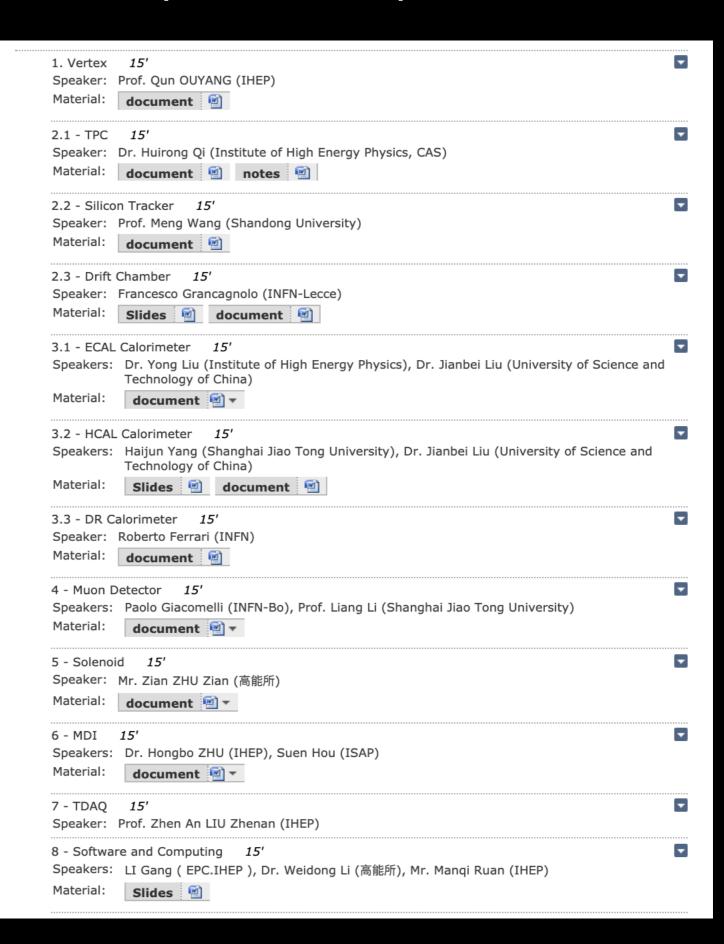
- 1.1: Need expanded version (João) with help of Zhijun and Ouyang
- 1.2: Received update from Manuel Looks good, but needs formatting updates
- 2.1: Needed a better schedule
- 2.2: Discussion on possibly merging projects. Need for more details Meeting on Monday. Outcome?
- 3.1: Both needed update schedule
- 3.2.1: DHCAL needed update format
- 3.3: DR calorimeter project in Korea to be included and expanded
- 4.2: Update title
- 6.1: Considerable updates needed
- 6.2: Needed updates
- 8: Not existing

Meeting last week:

https://indico.ihep.ac.cn/event/11799/

Please update this indico page and email me to let me know you have done it.

Best way not to loose information



Word document template:

Template to be used

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

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 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 2.2 Silicon Tracker Prototype

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 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 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 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
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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 6.2 Interaction Region Mechanics

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