

Introductory remarks

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中國科學院高能物理研究所

*Institute of High Energy Physics
Chinese Academy of Sciences*

Rome Workshop

• CEPC Workshop in May

- Rome, **May 24, 25 and 26** (Thurs - Sat)
- <https://agenda.infn.it/conferenceDisplay.py?confId=14816>
- Registration is open: Deadline April 24
 - Email registration: cepc2018localorganizer@lists.roma3.infn.it
 - Check website to request visa letter
 - Conference fee: 150 Euro
 - **71** people registered (**38** people from China, 20 from Italy)

• Poster session

- Italy can provide 4-5 posters
- What about us?



Workshop on the Circular Electron-Positron Collider
EU Edition

Roma, May 24-26 2018
 University of Roma Tre

<https://agenda.infn.it/conferenceDisplay.py?ovw=True&confId=14816>

<p>Scientific Committee</p> <p>Franco Bedeschi - INFN, Italy Alain Blondel - Geneva Univ., Switzerland Daniela Bortoletto - Oxford Univ., UK Manuela Boscolo - INFN, Italy Biagio Di Micco - Roma Tre Univ. & INFN, Italy Yunlong Chi - IHEP, China Marcel Demarteau - ANL, USA Yuanning Gao - Tsinghua Univ., China Joao Guimaraes da Costa - IHEP, China Gao Jie - IHEP, China Gang Li - IHEP, China Jianbei Liu - USTC, China Xinchou Lou - IHEP, China Felix Sefkow - DESY, Germany Jin Shan - Nanjing Univ., China Marcel Vos - CSIC, Spain</p>	<p>Local Organizing Committee</p> <p>Antonio Baroncelli (INFN, Italy) Biagio Di Micco (Roma Tre Univ. & INFN, Italy) Ada Farilla (INFN, Italy) Francesca Paolucci (Roma Tre Univ. & INFN, Italy) Domizia Orestano (Roma Tre Univ. & INFN, Italy) Marco Sessa (Roma Tre Univ. & INFN, Italy) Monica Verducci (Roma Tre Univ. & INFN, Italy)</p>
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Workshop News

- Poster Session
 - Who is planning to present a poster at the Conference?
 - If support is minimal, we should communicate to the Scientific Committee of the Workshop that this is not possible.
 - Can conveners send me a firm reply from their groups by end of the week?
- Parallel Sessions status:
 - Accelerator parallel session program finalized
 - Tracker?
 - Calorimeter?
 - Physics and Simulation?



CDR News

- We were asked by the management to provide power consumption for CEPC detector
- This is not trivial because of all questions/options regarding the detectors
- Can each group provide this information by Monday at the latest? There will be a steering group meeting on Tuesday, where we should report this input.
- Solenoid magnet: 1.25 MW per experiment



Conferences

- Other upcoming meetings of interest:
 - FCPPL meeting in Marseille, May 22-25
 - CEPC activities early in the week
 - Elba Instrumentation Conference (May 27-Jun 2) - linked to Rome Workshop
 - <https://agenda.infn.it/conferenceDisplay.py?confId=13450>
 - They encourage abstracts to be submitted by us
 - Deadline: 18 March 2018
 - FCC Week in Amsterdam, April 9-13
 - <https://indico.cern.ch/event/656491/overview>
 - ICHEP 2018 in Seoul, July 4-11
 - <https://indico.cern.ch/event/686555/>
 - Abstract deadline: 19 March 2018
 - LHCP 2018 in Bologna, June 4-9
 - Requesting poster abstract submissions: Deadline March 25



Workshop session structure

•Day 1 - Morning

- Plenary 9:00 - 11:00
- Plenary 11:30 - 13:00

•Afternoon:

- Parallel 14:30 - 17:00
 1. Final focus/MDI/Machine backgrounds
 2. Physics/Simulation
- Plenary 17:30 - 18:30

- Welcome (Rettore/INFN director) 9:00 - 9:15
- Introduction/Wks goals 9:15 - 9:30
- CepC (accelerator) status/plans/R&D 9:30 - 10:00
- FCC (accelerator) status/plans/R&D 10:00 - 10:30
- ILC/CLIC (acceler.) status/plans/R&D 10:30 - 11:00

- CepC (phys/detector) status/plans/R&D 11:30 - 12:00
- FCC (phys/detector) status/plans/R&D 12:00 - 12:30
- ILC/CLIC (phys/detect.) status/plans/R&D 12:30 - 13:00

•Day 3 - Morning

- Plenary 9:00 - 11:00
 - Summary of parallel
- Plenary 11:30 - 13:00
 - Open discussion and closing

- Summary Parallel 1 9:00 - 9:30
- Summary Parallel 2 9:30 - 10:00
- Summary Parallel 3 10:00 - 10:30
- Summary Parallel 4 10:30 - 11:00

- Panel discussion on future work 11:30 - 12:15
- Workshop summary 12:15 - 12:45
- Closing remarks (YiFang?) 12:45 - 13:00



Workshop session structure

• Day 2 - Morning

- Parallel 9:00 - 11:00

1. Accelerator
2. Physics/Simulation
3. Trackers
4. Calorimeters

- Parallel 11:30 - 13:00

• Afternoon:

- Parallel 14:30 - 17:00

- Parallel 17:30 - 18:30

• Conveners for parallel sessions:

- DAY 1:

- **MDI:** Mike Koratzinos + Ivanka Bozovic
- **Physics/Simulation:** Fulvio Piccinini + Manqi Ruan

- DAY 2:

- **Accelerator:** Jie Gao, Yunlong Chi (+ foreigners)
- **Physics/Simulation:** Patrizia Azzi, Yaquan Fang, Gang Li, Jenny List
- **Tracker:** Paolo Giacomelli, Zhijun Liang, Huirong Qi, Daniela Bortoletto, Werner Riegler
- **Calorimeter:** Roberto Ferrari, Jianbei Liu, Imad Laktineh, Massimo Caccia



Talks: MDI

DAY I

Parallel I:
Day 1

MDI/Final focus/backgrounds -- Requirements

Conveners: Ivanka Božovic-Jelisavcic, Mike Koratzinos

Talk 1

Overview MDI

Talk 2

Beam structure & backgrounds (background evaluation/ optimization implications on detectors bunch/time structure & options)

Hongbo Zhu (IHEP)

Talk 3

Quad location/forward space (implications on luminometers/tracking)

Talk 4

Solenoid field compensation (implications of higher fields on shielding and compensating magnets, luminosity, other)

Pipe sizes/cooling (implications on vertex detectors)



Talks: Physics and Simulation

DAY I

Parallel II: Day 1	Physics/Simulation -- Requirements	Conveners:F. Piccinini, Manqi
Talk 1	Z pole physics	
Talk 2	WW physics	Maarten (Saclay)?
Talk 3	Higgs physics	
Talk 4	Top physics	
Talk 5	Beam quality and properties	FCC-ee person?



Talks: Physics and Performance

Parallel IV:
Day 2

Physics and Performance

Conveners: P. Azzi, LI Gang,
Yaquan, Jenny List

Talk 1	CEPC baseline concept	
Talk 2	IDEA concept	
Talk 3	Higgs --> tautau	Yu Dan
Talk 4	Higgs --> ZZ	??
Talk 5	Higgs—> gamma gamma	Fangyi?
Talk 6	Higgs —> mumu	(probably combine with combination talk)
Talk 7	Higgs—>2 jet2	Baiyu (remotely?)
Talk 8	WW fusion Higgs cross section and Higgs width	Hao Liang/Manqi (IHEP)
Talk 9	Higgs --> WW	Li Tong (Shandong)
Talk 10	Higgs to invisible	Xin Shi?
Talk 11	Combination of CEPC Higgs precision measurement	Kaili Zhang (IHEP)
Talk 12	Electroweak	Marten (Saclay) ?
Talk 13	Electroweak	Zhijun (IHEP)?
Talk 14	Electroweak	

30 minutes (20+10 min) talks



Talks: Tracker

Parallel V:
Day 2

Tracker

Conveners: Paolo Giacomelli, Zhijun Liang, Huirong Qi, Werner Riegler, Daniela Bortoletto

Talk 1

Drift Chamber at CEPC

Franco G?

Talk 2

Overview activities of TPC module and prototype for CEPC

Huirong Qi

Talk 3

ILC TPC talk

Talk 4

TPC talk

Ph.D student from Tsinghua

Talk 5

Status of CEPC CMOS pixel prototype - JadePix1

Xin Shi (IHEP)

Talk 6

Development of high granularity pixel sensors for CEPC Vertex Detector

Zhou Yang (IHEP)

Talk 7

Plans for small CEPC pixel prototype

Talk 8

Silicon tracker at CEPC

Talk 9

Full silicon detector option for CEPC

Talk 10

CEPC muon detector overview

Talk 11

MPGD options for CEPC

Talk 12

Silicon detector mechanics and construction R&D considerations for CEPC

Tim Jones (Liverpool)

Talk 13

R&D Progress of CEPC Detector Magnet

Zian Zhu (IHEP)

Talk 14

Preliminary study of HTS option for CEPC detector magnet

Feipeng Ning (IHEP)

30 minutes (20+10 min) talks



Talks: Calorimeter

Parallel VI:
Day 2

Calorimeter Talks

Conveners: Roberto Ferrari,
Massimo Caccia, Jianbei Liu, Imad
Laktineh

Talk 1

CEPC ECAL R&D

Mingyi Dong (IHEP)

Talk 2

CEPC HCAL R&D

Boxiang Yu (IHEP)

Talk 3

CEPC ECAL simulation and optimization

Hang Zhao (IHEP)

Talk 4

CEPC HCAL simulation and optimization

Bing Liu (SJTU)

Talk 5

Lumical

Ivanka Bozovic-Jelisavcic (Vinca)

Talk 6

Talk 7

Talk 8

Talk 9

Talk 10

Talk 11

Talk 12

Talk 13

Talk 14

30 minutes (20+10 min) talks