

# THE 2018 INTERNATIONAL WORKSHOP ON HIGH ENERGY CIRCULAR ELECTRON POSITRON COLLIDER

November 12-14, 2018

Institute of High Energy Physics, Beijing, China

<https://indico.ihep.ac.cn/event/7389>

Submissions of abstracts are encouraged.

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Young-Kee Kim, U. Chicago (Chair)  
Barry Barish, Caltech  
Hesheng Chen, IHEP  
Michael Davier, LAL  
Eckhard Elsen, DESY  
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Geoffrey Tayler, U. Melbourne  
Henry Tye, IAS, HKUST  
Yifang Wang, IHEP  
Harry Weerts, ANL

## Local Organizing Committee

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Joao Guimaraes Costa, IHEP  
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Jie Gao, IHEP  
Shinian Fu, IHEP  
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Meng Wang, SDU  
Nu Xu, CCNU/IMP  
Haijun Yang, SJTU  
Hongbo Zhu, IHEP

### Conference secretaries:

Wanyu Niu, IHEP

Gang Li, IHEP

Email: [cepcWS2018@ihep.ac.cn](mailto:cepcWS2018@ihep.ac.cn)

Tel: +(00)86-1088236054

+(00)86-176 1043 0906

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## I. About the CEPC

**We appreciate your participation to International Workshop on High Energy Circular Electron Positron Collider (CEPC) in Beijing on Nov.12-14, 2018.**

The International Workshop on the CEPC aims at gathering scientists around the world to study the Circular Electron Positron Collider (CEPC) as a Higgs factory. The focuses will be the measurement of the Higgs properties with high precision, probing new physics through the Higgs boson, to study the full spectrum of the physics cases, to report on the conceptual design of the CEPC accelerator and the detector, as well as the simulation studies and the R&D of critical technologies. The possible upgrade path of the CEPC, including a high energy Super proton-proton Collider (SppC), will be explored.

One main purpose of the workshop is to make the CEPC study much more international by having broad participation and contributions globally, and to elevate the CEPC study group to an international organization.

## II. Conference Wifi Access

### **WIFI CONNECTION (Nov. 12-14)**

#### **Conference ID: CEPC2018**

The easiest way is to use eduoram network if you have it setup on your devices. If not, you can connect through the IHEP WiFi: select either IHEP or IHEP-5G network, you will be directed to a page with information in both Chinese and English, select "Meeting ID" under the "Select User Type", check the user agreement at the bottom, then continue and enter the conference ID "CEPC2018", you should be connected to the network.

**Important note:** gmail/google/facebook etc is blocked in China, you can use ssh tunnel for accessing them, see instruction at <https://drewsymo.com/2016/05/09/ssh-tunnel-in-30-seconds-mac-osx-linux/>  
You can setup to forward messages from gmail to CERN mail server which is accessible in China.



### III. Committees

#### International Advisory Committee (IAC):

Young-Kee Kim (Chair)	Univ. of Chicago	Joe Lykken	Fermilab
Barry Barish	Caltech	Luciano Maiani	Sapienza Univ. of Rome
Hesheng Chen	IHEP	Michelangelo Mangano	CERN
Michael Davier	LAL	Hitoshi Murayama	UC Berkely/IPMU
Eckhard Elsen	DESY	Katsunobu Oide	KEK
Brian Foster	Oxford	Robert Plamer	BNL
Rohini Godbole	CHEP, India Inst. of Science	Ian Shipsey	Oxford
David Gross	UC Santa Barbara	Steinar Stapnes	CERN
George Hou	Taiwan Univ.	Geoffrey Taylor	Univ. of Melbourne
Peter Jenni	CERN	Henry Tye	IAS, HKUST
Eugene Levichev	BINP	Harry Weerts	ANL
Lucie Linssen	CERN		

#### Local Organizing Committee (LOC):

Jianming Qian (Chair)	Univ. of Michigan	Xinchou Lou	IHEP
Qing-Hong Cao	Peking Univ.	Yajun Mao	PKU
Joao Guimaraes Costa	IHEP	Qing Qin	IHEP
Yaquan Fang	IHEP	Manqi Ruan	IHEP
Jie Gao	IHEP	Jingyu Tang	IHEP
Shinian Fu	IHEP	Jianchun Wang	IHEP
Yuanning Gao	Peking Univ.	LianTao Wang	Univ. of Chicago
Hong-Jian He	SJTU	Meng Wang	SDU
Xiaogang He	SJTU	Nu Xu	CCNU/IMP
Shan Jin	NJU	Haijun Yang	SJTU
Jianbei Liu	USTC	Hongbo Zhu	IHEP

#### Workshop Secretaries:

Name	Email	Phone
Dr. Gang Li		
Ms. Wanyu Niu	<a href="mailto:cepcws2018@ihep.ac.cn">cepcws2018@ihep.ac.cn</a>	+86 10 8823 6054
Ms. Zhaoru Zhang		

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**Scientific Program Committee:**

Daniela Bortoletto (co-chair)	Oxford	Jianming Qian (co-chair)	Univ. of Michigan
Suyong Choi	Korea Univ.	Bill Murray	Warwick/RAL
Joao Guimaraes Costa	IHEP	Christopher Tully	Princeton
Jie Gao	IHEP	LianTao Wang	Univ. of Chicago
Yuanning Gao	PKU	Charlie Young	SLAC
Suen Hou	Academic Sinica		

**CEPC session conveners:**

CEPC session I	Jie Gao (IHEP), Maria Biagini (Frascati)
CEPC session II	Yuan Zhang (IHEP), Sergei Nikitin (BINP)
CEPC session III	Yunlong Chi (IHEP), Zhanguo Zong (KEK)
CEPC session IV	Guoxi Pei (IHEP), Angeles Fauss (LAL)
CEPC session V	Jianli Wang (IHEP), Calo Pagani (LAL)
SppC session	Qingjin Xu (IHEP), Kazuhito Ohmi (KEK)

**CEPC-Industry Partnership Consortium session conveners:**

CIPC session I	Jinlin Gao
CIPC session II	Yu Xiao (肖豫)
CIPC session III	Chuanbing Cai (蔡传兵)
CIPC session IV	Daming Sun (孙大明)
CIPC session V	Shunhe Yu (于顺和)
CIPC session VI	Jie Gao, Jinlin Gao

**Detector session conveners:**

Silicon detector	Massimo Caccia (Insubria), Qun Quyang (IHEP)
Gas detector	Paolo Giacomelli (Bologna), Huirong Qi (IHEP)
Calorimetry	Jianbei Liu (USTC), Chris Tully (Princeton), Haijun Yang (SJTU)
Machine-Detector Interface	Sha Bai (IHEP), Ivanka Bozovic (VINCA), Hongbo Zhu (IHEP)
Trigger and DAQ	Wolfgang Kuehn (Giessen), Zhenan Liu (IHEP)
Computing and Software	Weidong Li (IHEP), Manqi Ruan (IHEP), Xiaomei Zhang (IHEP)

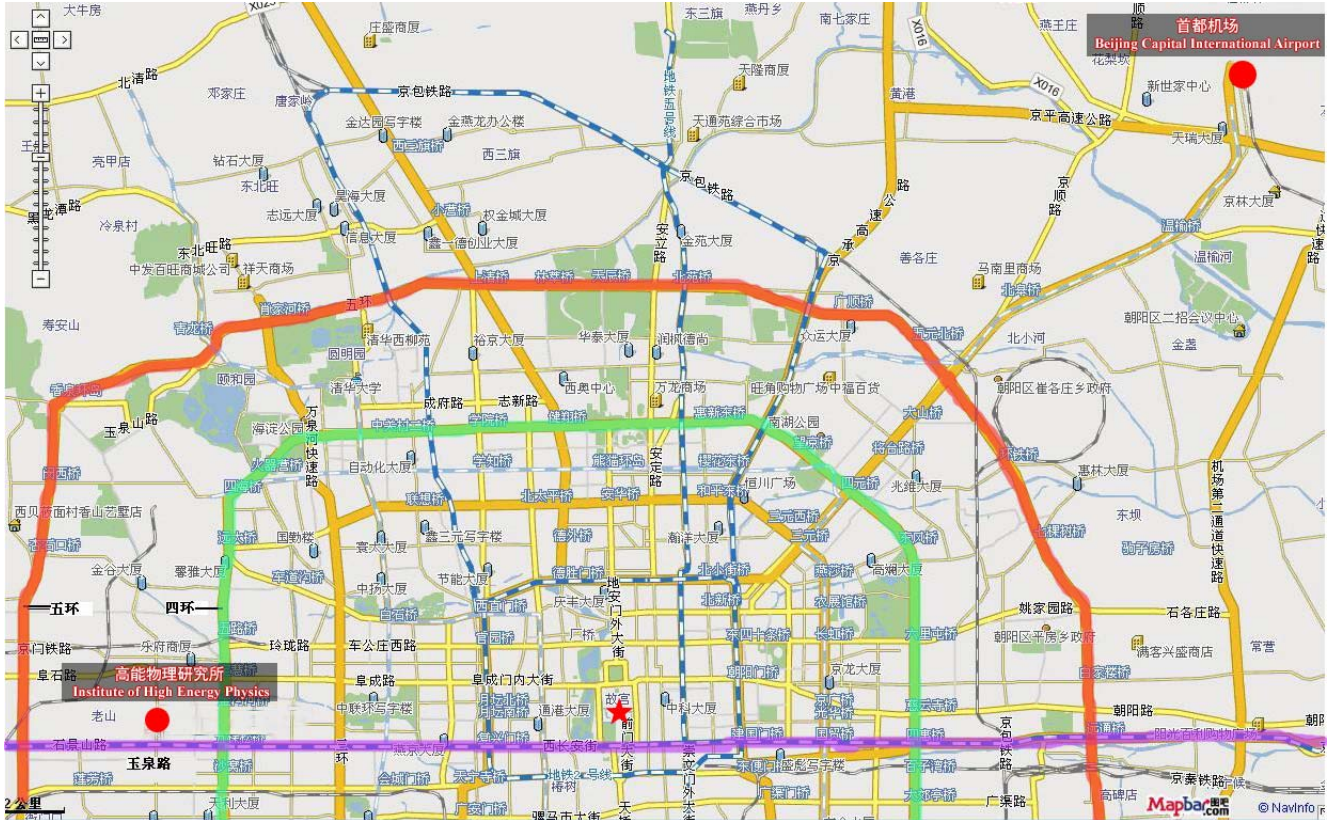
**Physics session conveners:**

Higgs physics	Yaquan Fang (IHEP), Hong-Jian He (SJTU), Nathaniel Craig (UCSB)
Electroweak physics	Maarten Boonekamp (Saclay), Ayres Freitas (Pittsburgh), Zhijun Liang (IHEP)
Flavor and QCD physics	Lars Eklund (Glasgow), Peter Skands (Monash), Jianchun Wang (IHEP), HuaXing Zhu (ZJU)
Beyond Standard Model	Qiang Li (PKU), Andrew Long (Michigan/Rice)
Tools and performance	Jean-Claude Brient (LLR), Manqi Ruan (IHEP)

## IV. General Information

**LOCATION:** 19B Yuquan Road, Shijingshan District, Beijing, China  
北京市石景山区玉泉路19号乙

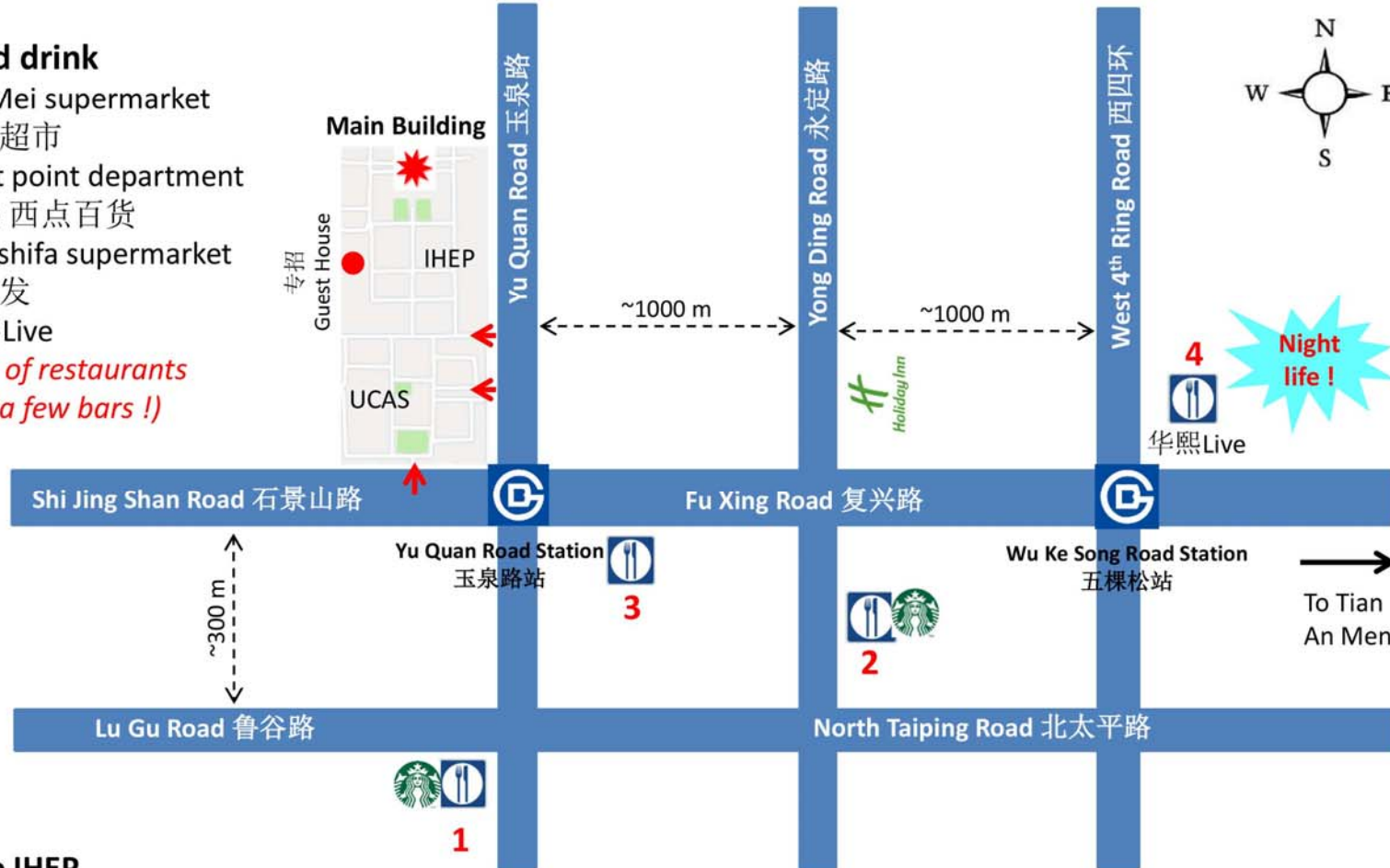
### IHEP in relation to Beijing Capital International Airport



## Area around IHEP and Holiday Inn

## Food and drink

- 1: Wu Mei supermarket  
物美超市
- 2: West point department  
store 西点百货
- 3: Chaoshifa supermarket  
超市发
- 4: 华熙Live  
*(Lots of restaurants  
and a few bars !)*



**To IHEP**

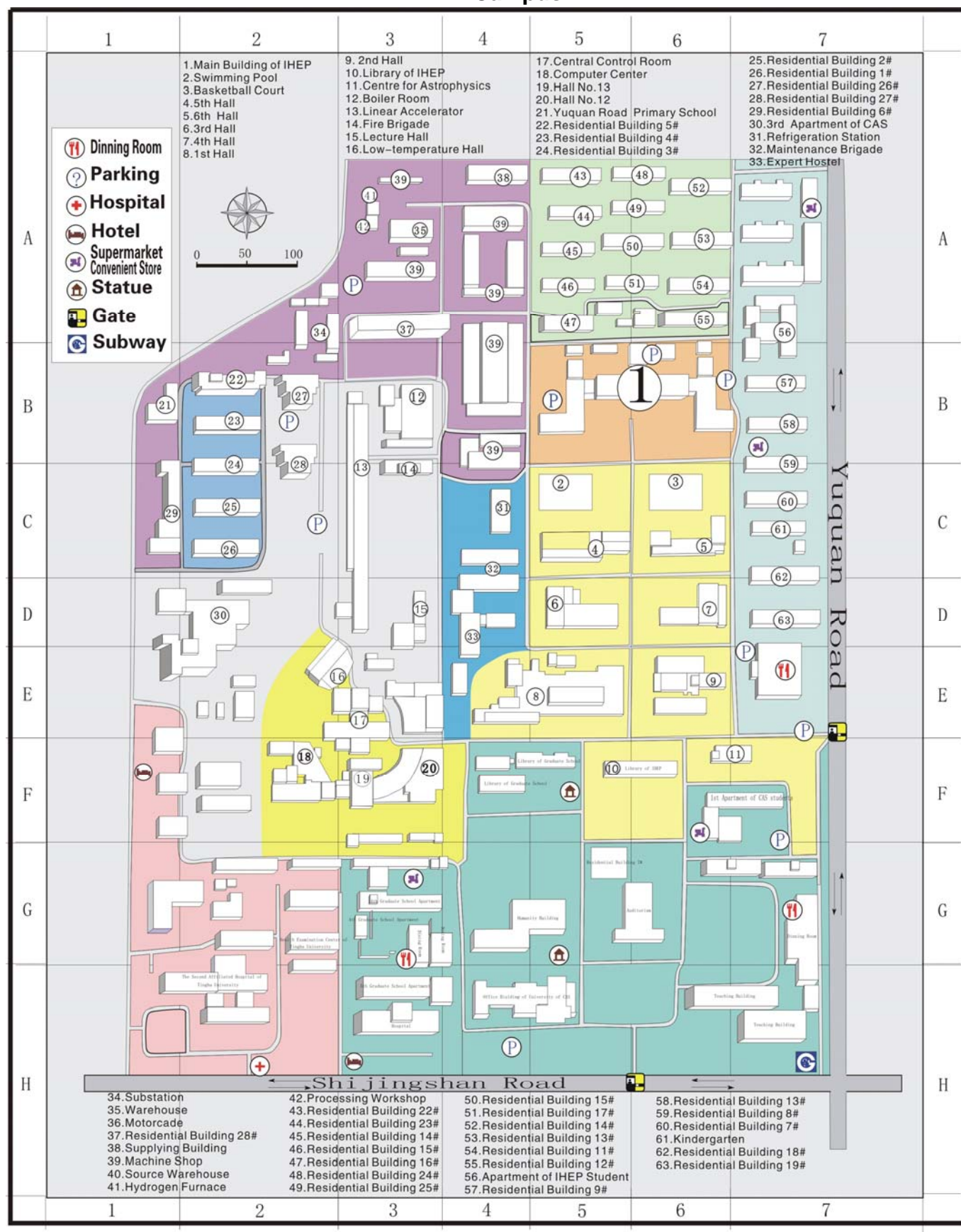
By subway: Line 1 to Yu Quan Road station, take Exit A2, follow one of the small red arrows on the map, a 10 minute walk to the main building

By foot from the Holiday Inn: a ~25 minute walk

**To 华熙Live** by subway: Line 1 to Wu Ke Song Road Station, take Exit B1.



# IHEP Campus



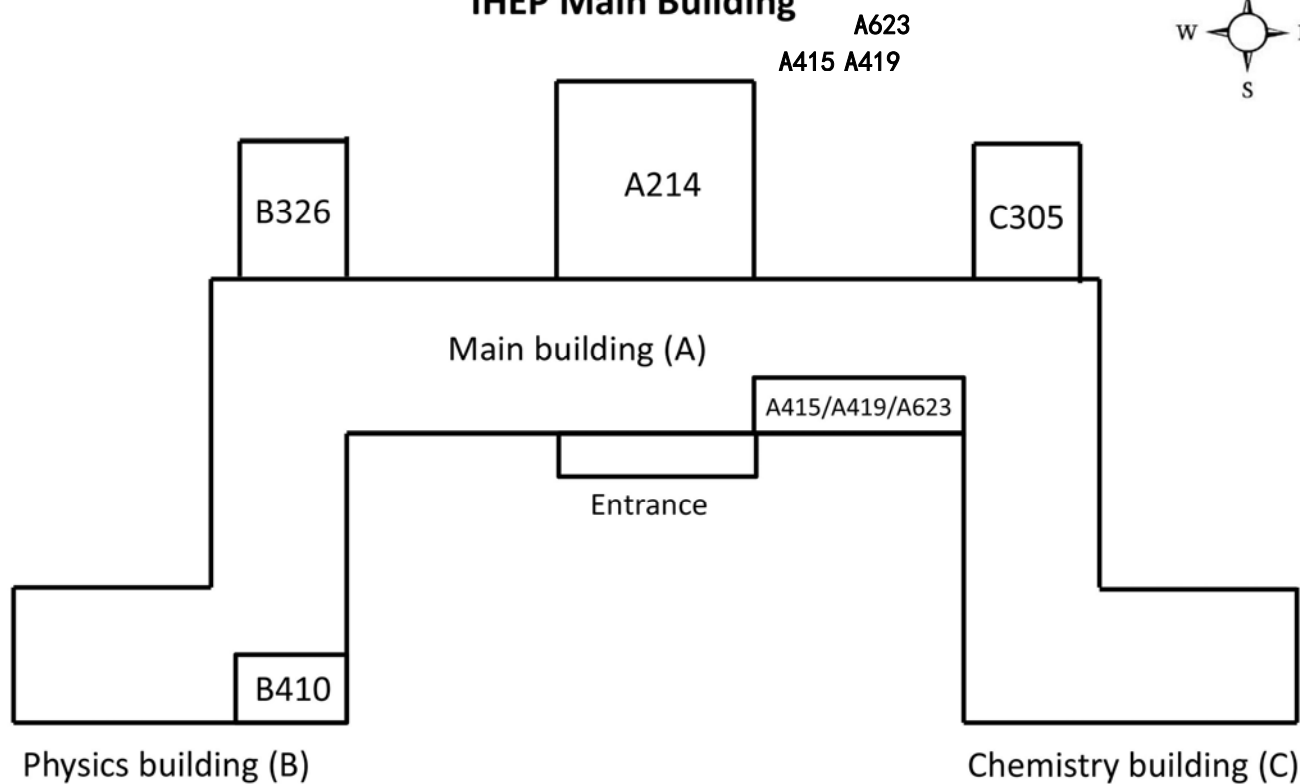


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**REGISTRATION DESK:**

- A214, Mainbuilding, IHEP
- Nov.11 (Sunday) at 3:00 -5:00 PM ; Nov. 12(Monday) at 8:00 – 8:30 AM

高能所主楼平面图  
IHEP Main Building



Notes: A214                      2ndfloor  
C305/B326                  3rd floor  
B410/A415/A419        4th floor

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## **LUNCH, RECEPTION and BANQUET**

**Lunch:** The IHEP Expert Restaurant supplies buffet at lunch time.(only for non-IHEP participants)

**Poster & Reception:** 18:30-21:00, Nov. 12 (Monday),

**Site:** Lobby of the new building of IHEP (多学科大楼一层)

**Banquet:** Tuesday, November 13, 19:00-21:00, Meizhou Dongpo Restaurant (北京市石景山区石景山路 22 号万达广场-眉州东坡酒楼石景山店 010-68661177 59683388) All of participants can go there by the shuttle at 6:40 pm in front of the IHEP Main building.

Banquet Shuttle Bus:

IHEP ➡ Meizhou Dongpo Restaurant : 18:40    main building

Meizhou Dongpo Restaurant ➡ IHEP/Holiday Inn :    20:40

## V. Scientific Programme of the CEPC International Workshop 2018

### Location for Plenary and Parallel Sessions

2018 CEPC Workshop Schedule Overview

Monday			Tuesday			Wednesday		
8:00 Bus leaves Holiday Inn			7:40 Shuttle leaves Holiday Inn			7:40 Shuttle leaves Holiday Inn		
Time	Room	Topics or Sessions	Time	Room	Topics or Sessions	Time	Room	Topics or Sessions
<i>Plenary</i>		Welcome	<i>Parallel</i>	B326	CEPC II	<i>Parallel</i>	B326	CEPC V
8:30		CEPC project overview	8:00	B410	CIPC II	8:00	B410	CIPC VI
—	A214	CEPC physics motivation	—	C305	Silicon detector I	—	C305	MDI and luminosity
10:10		CEPC Accelerator CDR and R&D	10:00	A415	Electroweak physics I	10:00	A419	Computing and software
							A415	BSM physics II
10:10		Photo and Tea Break	10:00		Tea Break	10:00		Tea Break
<i>Plenary</i>		CEPC Detector and physics CDR	<i>Parallel</i>	B326	SppC	<i>Plenary</i>		
10:40	A214	CEPC Software and performance	10:30	B410	CIPC III	10:30		
—		Status of ILC/CLIC	—	C305	Silicon detector II and Solenoid	—	A214	Discussions
12:30		Status of FCC-ee	12:30	A419	Tools and performance II	12:30		
				A415	Electroweak physics II			
12:30		Lunch	12:30		Lunch	12:30		Lunch
12:30	B410	IB meeting						
<i>Plenary</i>			<i>Parallel</i>	B326	CEPC III	<i>Plenary</i>		
14:00		CEPC detector R&D	14:00	B410	CIPC IV	14:00		Physics vision
—	A214	SppC and HTS status	—	C305	Calorimetry I	—	A214	Accelerator summary
15:30		CEPC-SppC infrastructure	16:00	A419	Trigger and DAQ	15:30		Detector summary
				A415	Higgs physics I			
15:30		Tea Break	16:00		Tea Break	15:30		Tea Break
<i>Parallel</i>	B326	CEPC I	<i>Parallel</i>	B326	CEPC IV	<i>Plenary</i>		CDR public release
16:00	B410	CIPC I	16:30	B410	CIPC V	16:00		Physics summary
—	C305	Gas detector	—	C305	Calorimetry II	—	A214	CIPC report
18:00	A419	Tools and Performance I	18:30	A415	Higgs physics II	18:15		IB report
	A415	Flavor and QCD		A419	BSM physics I			Conclusion/Adjourn
			18:45		Buses leave for banquet			
18:30		Reception and Posters (New building)	19:00		Banquet - 眉州东坡(石景山店)			
20:00		Bus leaves for Holiday Inn	20:45		Buses leave for Holiday Inn	18:20		Bus leaves for Holiday Inn

Lunch: Non-IHEP participants: Expert restaurant (专招), IHEP participants: on your own, not enough space at the expert restaurant (自理, 专招没有足够位置).

CIPC CEPC-Industry Partnership Consortium





➤ (3) Airport shuttle bus:

You also can take airport shuttle bus from the airport to the Gong Zhu Fen bus station. The fare is 16RMB (2.4USD). Then you can take taxi to the Hotel or the Guest House. The fare is about 25RMB (3.5 USD). If you take the airport shuttle bus to Gong Zhu Fen, please show the following tag ③ to the check-in staff. When you arrive to Gong Zhu Fen, you need to take a taxi to the Hotel, please show the tag ①or ② to the taxi driver. 【MAP】



➤ If you take taxi, please show this to the taxi drive.

①请送我到永定路的长峰假日酒店

Please send me to Chang-Feng Holiday Inn at Yong Ding Lu Street. r

②请送我到玉泉路（19 号乙）高能物理研究所的专家招待所

Please send me to the IHEP Guest House at YU Quan Lu Street.

➤ If you take airport shuttle bus, please show this to the airport staff or any one near by you.

③请告诉我，在哪里乘民航班车去公主坟

Please send me where the airport shuttle bus to Gong Zhu Fen is.

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- *If you want to eat outside IHEP nearby, there are some restaurants in Wu Mart(物美) supermarket and some around Wu Ke Song (五棵松) subway station which called “华熙 live 五棵松”.*

For Wu Mart, you can walk there.

For Wu Ke Song (五棵松) restaurants, you can take subway line 1 (四惠东方向/Si Hui Dong direction) for one station and get off at Wu Ke Song (五棵松) stop. Please go out following B1 东北口 (Northeast exit) , you will see a big indicator with words “华熙 live 五棵松”. It is very near to Wu Ke Song (五棵松) subway station.

### **Emergency Contact Information:**

If you have any problems, you may call the following members of the Organization Committee,

- Email: cepcws2018@ihep.ac.cn
- Ms. Wanyu Niu: 86-17610430906