



中国科学院大学
University of Chinese Academy of Sciences



ICTP-AP
International Centre
for Theoretical Physics Asia-Pacific
国际理论物理中心-亚太地区

2026 International Training Workshop on Frontiers from Quanta to Cosmos Physics

参会指南

Conference Guide

2026 年 8 月 23 日-9 月 6 日 中国 北京

August 23-September 6, 2026 Beijing China

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Background

The 2026 International Training Workshop on Frontiers from Quanta to Cosmos Physics (FQCP2026) will be held in Beijing from 23 August to 6 September 2026. This intensive program offers interdisciplinary training at the intersection of particle physics, astrophysics, and cosmology, with frontier lectures covering gravitational waves, dark matter, black holes, effective field theory, and AI-assisted research. It is open to international students (currently studying outside China) holding a BSc or higher in physics, with master's and PhD candidates particularly welcome.

Organizer:

The International Centre for Theoretical Physics Asia-Pacific (ICTP-AP), UCAS

Local Organising Committee:

Huaike Guo, Jun Zhang, Andrew Miller, Teng Ma, Xiaoyong Chu, Jun Nian

About the Organiser:

The International Centre for Theoretical Physics Asia-Pacific (ICTP-AP) is under the auspices of UNESCO in cooperation with the Chinese Academy of Sciences (CAS), the National Science Foundation China (NSFC) and the Abdus Salam International Centre for Theoretical Physics (ICTP, Trieste). ICTP-AP is located in Beijing, it's China's first UNESCO category 2 centre in the area of basic science. ICTP-AP is affiliated with the University of Chinese Academy of Sciences (UCAS). It is a non-profit organization that carries out high-level scientific research, education and training in basic science and the relevant interdisciplinary areas.



Date & Places

Date: August 23-September 6, 2026

Conference Accommodation Information/会议住宿信息

Hotel	Address	Contact
<u>Liaoning International Hotel</u> 辽宁大厦	No. 2 Jia, North 4th Ring West Road, Haidian District, Beijing, China	+86-10-62589999 +8620-86009099
<u>Wuke Hotel</u> 物科宾馆	No. 8, South 3rd Street, Zhongguancun, Haidian District, Beijing 100190, China (near Baofu Temple)	010-82649111

Conference Dining Information/会议用餐信息

Meals	Name & Location	Time
Breakfast	Provided at the accommodation hotel (Floor 5, Wuke Hotel) 住宿酒店提供	7:00-8:40
Lunch	Northwest Cuisine Restaurant 西北风味餐厅	12:00-14:00
Dinner	Northwest Cuisine Restaurant 西北风味餐厅	17:00-20:00

Important Notice:

- 1) Lunch & dinner will be provided by the conference. Please present your meal card at the Northwest Cuisine Restaurant during the designated time and venue. Please keep your meal card safe, as lost cards will not be reissued;
- 2) Any adjustments to meal arrangements will be subject to further notice.

Accommodation & Conference Services Contact:

Jiejing Zhao zhaojiejing@ucas.ac.cn 15010116672

Fanzi Meng mengfanzi@ucas.ac.cn 1350957347

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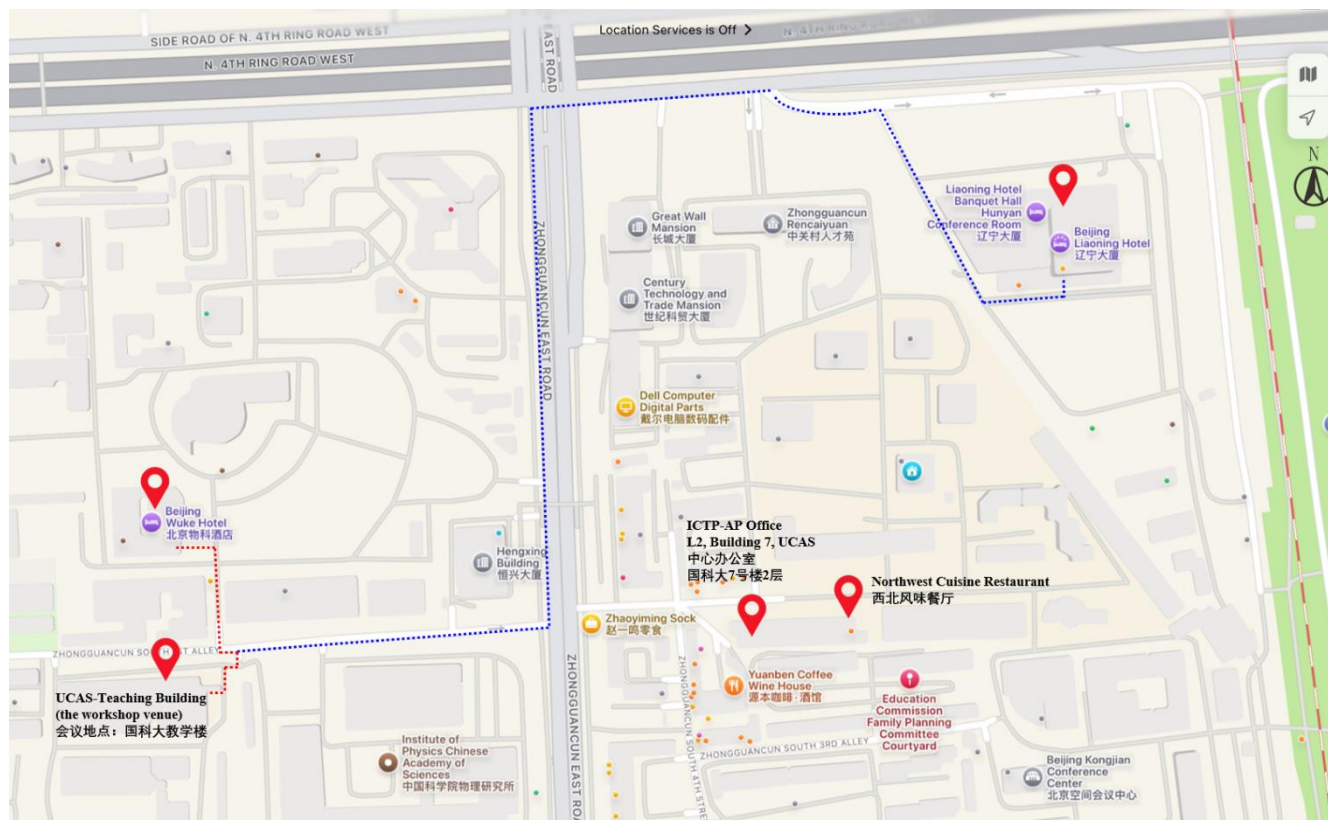
Registration

Time: 17:00-19:00 August 23, 2026.

Place: Lobby of Wuke Hotel

Address: No. 8 South Third Street, Zhongguancun, Wuke Hotel, Haidian District, Beijing

Signage Map for UCAS Teaching Building, Restaurant, and Hotels



Overall Schedule

		Sunday (8-23)	Saturday (8-29)	Sunday (8-30)	Monday (8-31)	Tuesday (9-1)	Wednesday (9-2)	Thursday (9-3)	Friday (9-4)	Saturday (9-5)	Sunday (9-6)
Chair											
9:00 9:50	Registration and Check-in (17:00-19:00)										
10:00 10:50											
11:00 12:00	Primordial Gravitational Waves from Cosmic Inflation (Shaaban Khalil)	Testing Gravity with Cosmological Observations (Gen Ye)	Testing Strong-Field Gravity with Binary Black Hole Signals (Swetha Bhagwat)	Campus Tour and Cultural Exchange	AI for Scientific Discovery (Yanqing Ma)	Aspects of Classical and Quantum Black Holes (Jun Nian)	Testing Elementary Particle Theories using Astrophysical Data (Chen Sun)	Bayesian Parameter Estimation for Compact Binary Coalescences in LIGO and LISA (Avi Vajpeyi)	Check-out		
12:00 14:00	Induced Gravitational Waves (Chen Yuan)	Lunch	Scattering-Amplitude Methods in Effective Field Theory (Teng Ma)		How Gravitational Wave Interferometers Pick Up Signals (Evan Hall)	Searching for Stochastic Gravitational Wave Background (Hualke Guo)	Closing				
14:00 14:50	Fundamentals of AI/ML and LLM for Gravitational Wave Detection (He Wang)	Industrialize Scientific Research with Large Knowledge Model (Kun Chen)	Collider/Agent (Xingbo Yuan)	Fundamental Limits in Gravitational-Wave Detection (Evan Hall)	Dark Matter: Observations and Models (Xiaoyong Chu)	Searching for Continuous Gravitational Waves (Andrew Miller)	Discussion				
15:00 16:00	Discussion	Discussion	Discussion	Gravitational Waves and Dark Energy (Paolo Creminelli)	Discussion	Discussion	Discussion				
16:00 17:00				Discussion		Discussion		Discussion			
17:00	Dinner										

For details of the schedule from August 24 to August 28, 2026, please refer to the website: <https://indico.ictp-ap.ucas.ac.cn/event/3/timetable/>.

Detailed Arrangements

Sunday / August 23

时间 Time	Activity	Location
12:00-	Check-in	Wuke Hotel 物科宾馆
17::00-19:00	Registration	
17:00-20:00	Dinner	

Saturday / August 29

时间 Time	Activity	Chairs	Location
9:00-10:50	Title: Primordial Gravitational Waves from Cosmic Inflation Shaaban Khalil	Huaike Guo	S101, UCAS Teaching Building 国科大中关村教学楼 S101
11:00-12:00	Title: Induced Gravitational Waves Chen Yuan		
12:00-14:00	Lunch		
14:00-16:00	Title: Fundamentals of AI/ML and LLM for Gravitational Wave Detection He Wang	Huaike Guo	S101, UCAS Teaching Building 国科大中关村教学楼 S101
16:00-17:00	Discussion	---	
17:00-20:00	Dinner		

Sunday / August 30

时间 Time	Activity	Chairs	Location
9:00-10:50	Title: Testing Gravity with Cosmological Observations Gen Ye	Jun Nian	S101, UCAS Teaching Building 国科大中关村教学楼 S101
11:00-12:00	Title: Induced Gravitational Waves Chen Yuan		
12:00-14:00	Lunch		
14:00-16:00	Title: Industrialize Scientific Research with Large Knowledge Model	Jun Nian	S101, UCAS Teaching Building 国科大中关村教学楼 S101

	Kun Chen		
16:00-17:00	Discussion	---	
17:00-20:00	Dinner		

Monday / August 31

时间 Time	Activity	Chairs	Location
9:00-10:50	Title: Testing Strong-Field Gravity with Binary Black Hole Signals Swetha Bhagwat	Andrew Miller	S301, UCAS Teaching Building 国科大中关村教学楼 S301
11:00-12:00	Title: Scattering-Amplitude Methods in Effective Field Theory Teng Ma		
12:00-14:00	Lunch		
14:00-16:00	Title: ColliderAgent Xingbo Yuan	Andrew Miller	S101, UCAS Teaching Building 国科大中关村教学楼 S101
16:00-17:00	Discussion	---	
17:00-20:00	Dinner		

Tuesday / September 1

时间 Time	Activity	Chairs	Location
9:00-12:00	Campus Tour	Haihong Jia & Ruoxuan Yu	History Museum & Library, UCAS Yanqihu Campus 国科大校史馆和图书馆
12:00-14:00	Lunch		
14:00-17:00	Cultural Exchange		
17:00-20:00	Dinner		

Wednesday / September 2

时间 Time	Activity	Chairs	Location
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9:00-10:50	Title: AI for Scientific Discovery Yanqing Ma	Huaike Guo	S101, UCAS Teaching Building 国科大中关村教学楼 S101
11:00-12:00	Title: How Gravitational Wave Interferometers Pick Up Signals Evan Hall		
12:00-14:00	Lunch		
14:00-14:50	Title: Fundamental Limits in Gravitational-Wave Detection Evan Hall	Huaike Guo	S101, UCAS Teaching Building 国科大中关村教学楼 S101
16:00-17:00	Title: Gravitational Waves and Dark Energy Paolo Creminelli		
17:00-20:00	Dinner		

Thursday / September 3

时间 Time	Activity	Chairs	Location
9:00-10:50	Title: Aspects of Classical and Quantum Black Holes Jun Nian	Jun Zhang	S101, UCAS Teaching Building 国科大中关村教学楼 S101
11:00-12:00	Title: Searching for Stochastic Gravitational Wave Background Huaike Guo		
12:00-14:00	Lunch		
14:00-16:00	Title: Dark Matter: Observations and Models Xiaoyong Chu	Jun Zhang	S101, UCAS Teaching Building 国科大中关村教学楼 S101
16:00-17:00	Discussion	---	
17:00-20:00	Dinner		

Friday / September 4

时间 Time	Activity	Chairs	Location
9:00-10:50	Title: Testing Elementary Particle Theories using Astrophysical Data Chen Sun	Xiaoyong Chu	S101, UCAS Teaching Building 国科大中关村教学楼 S101
11:00-12:00	Title: Searching for Stochastic Gravitational Wave Background		

	Huaike Guo		
12:00-14:00	Lunch		
14:00-16:00	Title: Searching for Continuous Gravitational Waves Andrew Miller	Xiaoyong Chu	S101, UCAS Teaching Building 国科大中关村教学楼 S101
16:00-17:00	Discussion	---	
17:00-19:30	Dinner		

Saturday / September 5

时间 Time	Activity	Chairs	Location
9:00-11:00	Title: Bayesian Parameter Estimation for Compact Binary Coalescences in LIGO and LISA Avi Vajpeyi	Teng Ma	S106, UCAS Teaching Building 国科大中关村教学楼 S106
11:00-12:00	Closing Ceremony		
12:00-14:00	Lunch		
14:00-17:00	Free Discussion	---	S106, UCAS Teaching Building 国科大中关村教学楼 S106
17:00-19:30	Dinner		

Sunday / September 6

时间 Time	Activity	Location
-12:00	Check-out	Wuke Hotel 物科宾馆

Appendix

Medical Support:

Hospital	Address	Distance to Venue	Contact
Beijing Zhongguancun Hospital 北京市中关村医院	No.12 Zhongguancun South Street, Haidian District, Beijing	~1 km	010-82548999
Beijing Haidian Hospital 北京市海淀区医院	No.29 Zhongguancun Street, Haidian District, Beijing	~2.2 km	010-82619999

Transportation:

From the airports

We recommend traveling from the airports to the conference venue by taxi.

From the railway stations

The suggested routes via public transportation from Beijing South/Beijing West/Beijing railway stations to the conference venue are as follows:

Departure Station	Recommended Subway Route	Total Stops	Estimated Time (Including Walk)
Beijing South Station	Line 4 → Zhongguancun Station	9 stops	~50 minutes
Beijing North Station	Line 13 → Wudaokou / Zhichunli Station	2 stops	~25–30 minutes
Beijing West Station	Line 9 → Line 4 → Zhongguancun Station	5 stops	~45 minutes
Beijing Railway Station	Line 2 → Line 4 / Line 10 → Zhichun Li Station	~9 stops	~55–60 minutes

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Hosted by:

The International Centre for Theoretical Physics Asia-Pacific (ICTP-AP), UCAS