



山东大学
SHANDONG UNIVERSITY

The 5th International Conference on Axion Physics and Experiment (Axion 2026)

会议手册

Conference Handbook

Host Institution: Shandong University

Qingdao, China

August 9th-13rd, 2026







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Transportation Information

出发地 → 目的地	交通方式	时长 (约)	费用 (约)	详细路线
[最优路线] 青岛站 (火车站) → 青岛黄海饭店	打车 	15 min	15 CNY	约 4 公里行程
	地铁 	20 min	3 CNY	乘坐 地铁 3 号线（青岛北站方向） 至 汇泉广场站 ，从 A 口 出站，步行约 200 米
青岛北 (高铁站) → 青岛黄海饭店	打车 	40 min	30 CNY	约 17 公里行程
	地铁 	45 min	4 CNY	乘坐 地铁 3 号线（青岛站方向） 至 汇泉广场站 ，从 A 口 出站，步行约 200 米
胶东国际机场 → 青岛黄海饭店	打车 	60 min	85 CNY	约 58 公里行程
	地铁 	90 min	7 CNY	乘坐 地铁 8 号线 至 青岛北站 ，换乘 3 号线 至 汇泉广场站 ，从 A 口 出站，步行约 200 米

(English version continues on next page)



Transportation Information

Route	Means of Transport	Time (≈)	Cost (≈)	Detailed Route
[Recommended] Qingdao Railway Station → Qingdao HuangHai Hotel	Taxi 	15 min	15 CNY	About 4 km to the conference site.
	Metro 	20 min	3 CNY	Line 3 to Huiquan Square Station , the hotel is 200 meters to the north of Exit A . It takes about 20 minutes in total.
Qingdao North Railway Station → Qingdao HuangHai Hotel	Taxi 	40 min	30 CNY	About 17 km to the conference site.
	Metro 	45 min	4 CNY	Line 3 to Huiquan Square Station , the hotel is 200 meters to the north of Exit A . It takes about 45 minutes in total.
Qingdao Jiaodong International Airport → Qingdao HuangHai Hotel	Taxi 	60 min	85 CNY	About 58 km to the conference site.
	Metro 	90 min	7 CNY	Line 8 to Qingdao North Railway Station , transfer to Line 3 to Huiquan Square Station . The hotel is 200 meters to the north of Exit A . It takes about 90 minutes in total.



Conference Venue

会议住宿: Accommodation:

- 青岛黄海饭店（青岛市延安一路 75 号）
QINGDAO HUANGHAI HOTEL (No. 75 Yan'an Road, Shinan District, Qingdao City, Shandong Province, China.)
- 联系电话：0532-55769999
Contact Information: 0532-55769999

酒店网络 Hotel Network	ChinaNet-HUANGHAI
连接方式 How to Connect	连网后自动弹出认证页，会议期间一次认证，全程可用。 Auto authentication page upon connection — one-time login, valid for the entire conference.

会议用餐: Dining information:

用餐 Dining	时间 Time	酒店 Hotel	地点 Location
早餐 Breakfast	07:00 - 09:30	青岛黄海饭店 Qingdao Huanghai Hotel	二楼中华厅 Zhonghua Hall (2F)
午餐 Lunch	11:30 - 14:00		
晚餐 Dinner	17:30 - 20:30		
晚宴 Banquet	8 月 10 日晚餐 August 10 th , Dinner	一楼明苑厅 MingYuan Restaurant (1F)	

Please remember to bring the Meal Tickets we provided for the lunch, dinner and banquet.
请您记得用餐时携带对应的餐券，感谢您的配合！

Accommodation and Dining

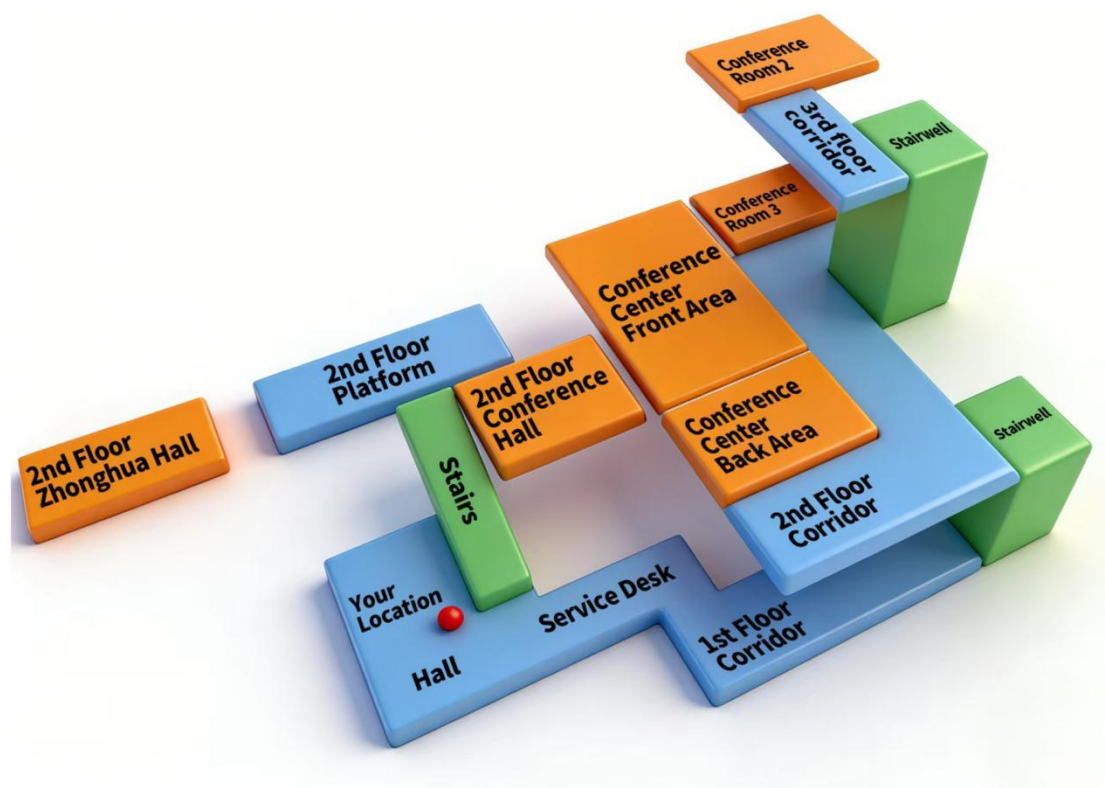
会 场 地 点: Venue Schedule:

8 月 10 日全天: 青岛黄海饭店二楼会议中心前厅
August 10 (full day) : Conference Center (2F), Front Area

8 月 11 日全天及 12 日上午: 青岛黄海饭店二楼会议中心后厅
August 11 (full day) & August 12 (morning): Conference Center (2F), Back Area

注册时间及地点: Registration:

8 月 9 日: 14:00-20:30 青岛黄海饭店大堂
August 9th: 14:00-20:30 at the lobby of Qingdao Huanghai Hotel.





Conference Program

August 10 th , Monday, Morning			
Conference Center (2F), Front Area			
Time	Title	Speaker	Chair
08:30-08:45	Opening Remark		Yufeng Zhou
08:45-09:15	(TBA)	Jing Shu	
09:15-09:45	Solar Production of Energetic Dark Particles	Shao-Feng Ge	
09:45-10:20	PHOTO & COFFEE BREAK		
10:20-10:45	Paths to Solving the Strong CP Problem and the Footprints Left Behind	Yuichiro Nakai	Xiaorui Lv
10:45-11:10	Mapping the ALPs: A Naturalness Map for Axions and ALPs	Andrew Fowlie	
11:10-11:35	Cosmological Collider Physics with Axions	Zhong-Zhi Xianyu	
11:35-12:00	Search for light dark particles at the BESIII experiment in China	Zhiqing Liu	
12:00-14:00	LUNCH Zhonghua Restaurant (buffet), 2nd floor, Qingdao Huanghai Hotel		
August 10 th , Monday, Afternoon			
Conference Center (2F), Front Area			
Time	Title	Speaker	Chair
14:00-14:25	Same-sign dimuon probe of charged lepton flavor violation at electron – photon colliders	Yu Zhang	Lei Wu
14:25-14:50	Axion-Like Particles at the Electron-Ion Collider	Keping Xie	
14:50-15:15	Supernova Constraints on Lepton Flavor Violating Axions	Zuowei Liu	
15:15-15:40	Axion Dark Matter from Parametric Resonance during the QCD Phase Transition	Qiaoli Yang	
15:40-15:55	COFFEE BREAK		
15:55-16:20	Black hole superradiance of interacting multi-fields	Jun Zhang	Jiashu Niu
16:20-16:45	Strong-Field Dynamics and Multimessenger Signatures of Ultralight Dark Matter	Yifan Chen	
16:45-17:10	Probing Ultralight Dark Matter with Gravitational Waves	Chen Yuan	
17:10-17:35	Search for ultralight scalar dark matter with quadratic interactions	Da Liu	
17:35-18:00	In-situ axion-conversion of a gamma-ray burst	Théo Abounnasr Martins	
18:00-20:30	BANQUET Ming Yuan Restaurant, 1st floor, Qingdao Huanghai Hotel		



Conference Program

August 11 th , Tuesday, Morning			
Conference Center (2F), Back Area			
Time	Title	Speaker	Chair
08:30-08:55	Resonant enhancement of axion dark matter decay	Nick Houston	Yu Gao
08:55-09:20	Laser wakefield based axion-like particle generation and detection	Min Chen	
09:20-09:45	Search for axionlike particles with ferromagnetic system	Wei Ji	
09:45-10:10	Quantum-enhanced dark matter searches using cat states	Pan Zheng	
10:10-10:25	COFFEE BREAK		
10:25-10:50	Search for Cosmic-Ray Produced Light Dark Meson at JUNO Detector	Jinmian Li	Deshan Yang
10:50-11:15	Constraints on axions from neutrino experiments	Ningqiang Song	
11:15-11:40	New Isocurvature Constraints and its Axionic Interpretations	Lingfeng Li	
11:40-12:05	Axion Magnetic Resonance and the Enhanced Axion Signal	Chen Sun	
12:05-14:00	LUNCH Zhonghua Restaurant (buffet), 2nd floor, Qingdao Huanghai Hotel		
August 11 th , Tuesday, Afternoon			
Conference Center (2F), Back Area			
Time	Title	Speaker	Chair
14:00-14:25	Discussion K to pi a decay within large N_C chiral perturbation theory	Jinbao Wang	Wei Chao
14:25-14:50	When stars dim into axions: A time-domain window on new physics	Hong-Yi Zhang	
14:50-15:10	Extreme-mass-ratio inspirals into axion clouds	Qixuan Xu	
15:10-15:30	Constraining axion couplings with the Hulse-Taylor binary system	Ziwen Yin	
15:30-15:50	Transient Bias for CP Domain Wall Decay and Dark Matter	Fangchao Liu	
15:50-16:10	Bias with a Timer: Axion Domain Wall Decay and Dark Matter	Yuxuan Hao	
16:10-16:25	COFFEE BREAK		



Conference Program

Time	Title	Speaker	Chair
16:25-16:45	Constraints on Axion-Like Particles with the Silicon Detector at a Nuclear Reactor	Yuanlin Gong	Yandong Liu
16:45-17:05	Semiconductor Spin-Qubit Arrays for Axion Dark Matter Search	Xiangjun Tan	
17:05-17:25	Detecting Axion Dark Matter by Artificial Magnetoelectric Materials	Chenhui Xie	
17:25-17:45	Axion Dark Matter Induced Modulation in Ferromagnetic Resonance and Spin Wave Interferometry	Jiayi Liu	
17:45-18:05	Discovering the Axiverse via Fifth Forces	Alexander Eberhart	
18:05-20:30	DINNER Zhonghua Restaurant (buffet), 2nd floor, Qingdao Huanghai Hotel		

August 12 th , Wednesday, Morning			
Conference Center (2F), Back Area			
Time	Title	Speaker	Chair
08:30-08:55	WIMP Meets ALP: Coherent Freeze-Out of Dark Matter	Bingrong Yu	Yanrui Liu
08:55-09:20	A Natural Dark Matter – Dark Energy Interaction from Axion – Monopole Dynamics	Huangyu Xiao	
09:20-09:45	Floquet and Sideband Dynamics of Photon – Axion Mixing in Coherent Axion Backgrounds	Runmin Yao	
09:45-10:10	Search for light WIMPs with BULLKID-DM experiment using monolithic arrays of detectors	Kangkang Zhao	
10:10-10:30	New limits on muon-philic dark matter searches and other recent progresses from PKMu	Leyun Gao	
10:30-10:45	COFFEE BREAK		
10:45-11:05	Physics-Informed Neural-Network Modeling of Axion–Photon Conversion in Structured Electromagnetic Fields	Nikolai Akintsov	Hong Zhang
11:05-11:25	Deconstructing the Extra-Dimensional Axion	Junxuan Xu	
11:25-11:45	S-matrix bootstrap bounds on self-interacting dark matter	Zhuo-Hui Wang	
11:45-12:05	Majoron Potential by Majorana fermion Loops	Mussawir Khan	
12:05-12:15	Introduction to Axion 2027	Yun Jiang	
12:15-12:20	Closing Remark		
12:20-14:00	LUNCH Zhonghua Restaurant (buffet), 2nd floor, Qingdao Huanghai Hotel		

Nearby Attractions



Jogging Map

Huiquan Square, Seawater Bathing Beach, Badaguan Scenic Area, 4.2KM



Introduction of Qingdao

Qingdao (青島), a vibrant coastal city in eastern Shandong, is renowned for its red-roofed houses, green trees, blue seas, and golden beaches. Once a German concession from 1898 to 1914, the city retains a unique blend of European-style architecture and Eastern charm, with landmarks such as the Tsingtao Brewery standing as legacies of that era. Today, Qingdao is not only a major seaport and financial hub, but also a modern metropolis that bridges Asia and Europe through the Belt and Road Initiative.

Qingdao attracts many tourists due to its seaside setting and temperate weather. Parks, beaches, sculptures and unique German and modern architecture line the shore. Visitors can wander along Zhanqiao Pier, admire the European-style villas in Badaguan, and enjoy the modern charm of May Fourth Square. For nature lovers, the majestic Laoshan Mountain and golden beaches offer the perfect escape, blending history, culture, and seaside leisure in one unforgettable destination.



Tourism Information

Zhanqiao Pier (built 1891):

Historic landmark extending into Qingdao Bay.



May Fourth Square: Features the Wind of May sculpture, honoring the May Fourth Movement.



No.1 Bathing Beach:

Century-old Huiquan Bay beach with golden sands.



WWI Heritage Museum:

China's only museum on WWI's impact on Qingdao.



Olympic Sailing Center:

2008 Olympic venue, now a lively waterfront.



Laoshan Mountain: China's highest coastal peak, known for Taoism and four scenic routes.



Tsingtao Beer Museum:

Showcases the 1903 brewery's history and brewing.



Signal Hill & Governor's Mansion:

Panoramic views and preserved German colonial architecture.





Conference Notes



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