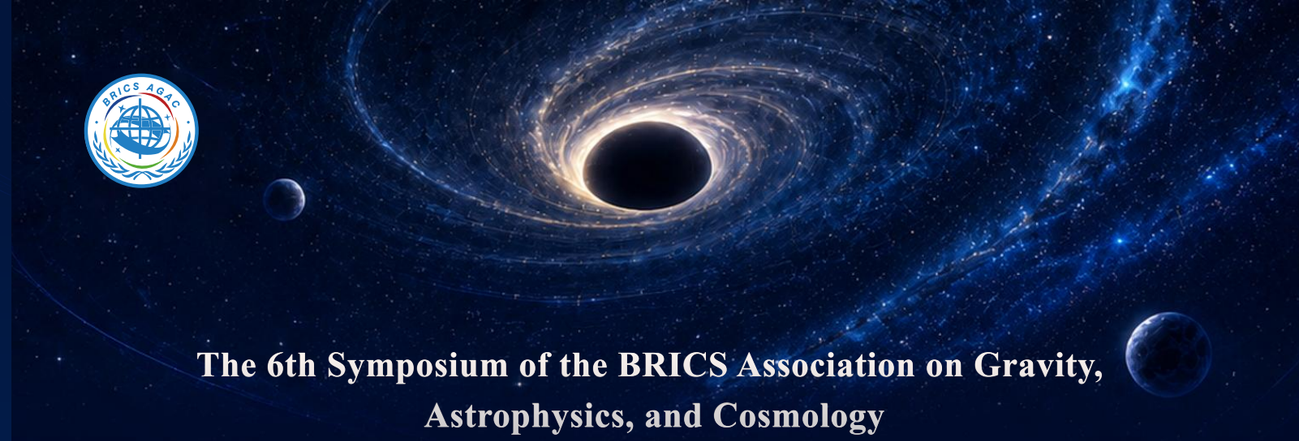
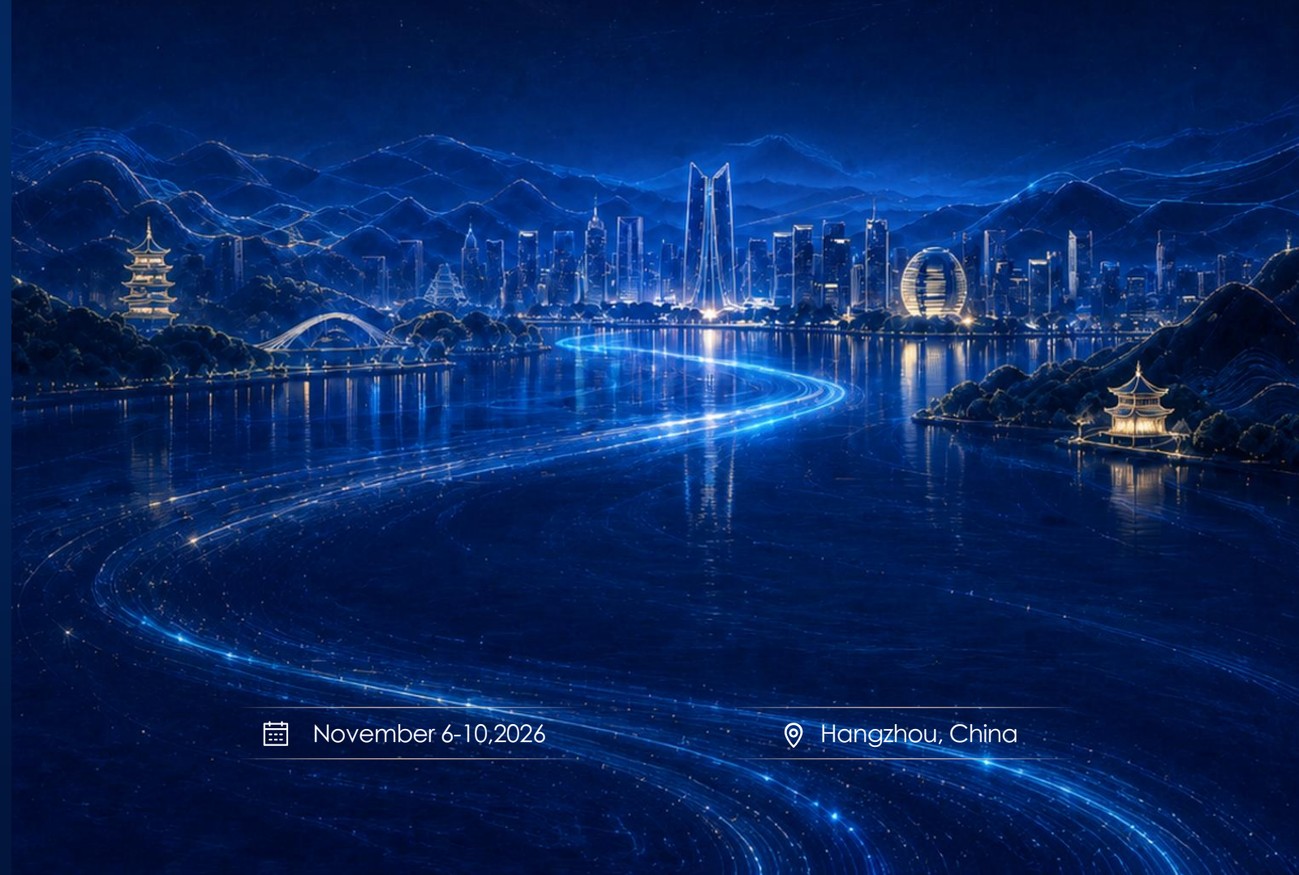


The 6th Symposium of the BRICS Association on Gravity, Astrophysics, and Cosmology (BRICS-AGAC Symposium 2026)

第六届“金砖国家引力、天体物理和宇宙学国际研讨会”

Handbook



November 6-10,2026

Hangzhou, China

Organizers & Supporters

The conference has been funded by the Peng Huanwu Innovation Research Center for Theoretical Physics.

Institute of Theoretical Physics, Chinese Academy of Sciences · Ningbo University

Zhejiang University of Technology · Hangzhou Normal University · Hangzhou Institute for Advanced Study, UCAS

CONTENTS

THE BRICS-AGAC SYMPOSIUM 01

COMMITTEE 02

ORGANIZERS & SUPPORTERS 03

CONFERENCE AGENDA 03

REGISTRATION 16

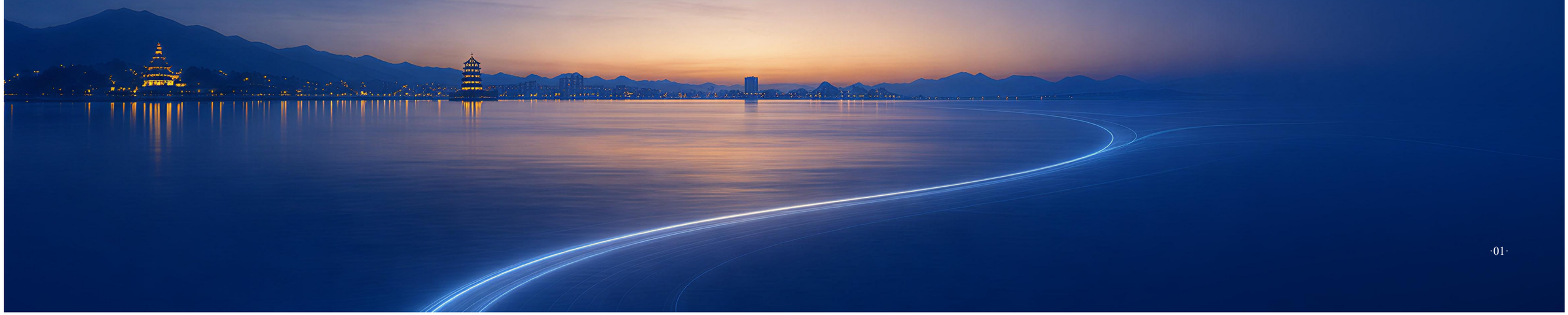
CONFERENCE SERVICES 17

- Conference Venue Information 17
- Conference Accommodation Information 18
- Conference Dining Information 18
- Contacts 18
- Transportation 19

THE BRICS-AGAC SYMPOSIUM

Considering that notable progresses have been made in the studies of gravitation, astrophysics, and cosmology among BRICS countries in the past decades, the BRICS Association on Gravity, Astrophysics, and Cosmology (BRICS-AGAC) was established at the end of 2016 to promote further collaborations between the member countries. This year, the BRICS-AGAC Symposium will come back to its founding place--Hangzhou.

Welcome to the 6th Symposium of the BRICS Association on Gravity, Astrophysics, and Cosmology (BRICS-AGAC Symposium 2026), to be held on November 6th-10th, 2026, near the West Lake in Zhejiang Hotel, Hangzhou city, Zhejiang Province, China. This symposium continues the tradition of fostering collaboration and sharing cutting-edge research among scientists from BRICS nations and around the globe.



COMMITTEE

Scientific Organization Committee

Elcio Abdalla (University of São Paulo, Brazil)
Kirill Bronnikov (RUDN University & National Research Nuclear University, Russia)
Rong-Gen Cai (Chairman, Ningbo University, China)
Bin Chen (Ningbo University, China)
Dmitri V. Gal'tsov (Moscow State University, Russia)
Roy Maartens (University of the Western Cape, South Africa)
Jeff Murugan (University of Cape Town, South Africa)
Pradyumn Kumar Sahoo (Birla Institute of Technology and Science, India)
Mohammad Sami (SGT University, India)
Lakshmanan Sriramkumar (Indian Institute of Technology Madras, India)
Carlos Alexandre Wuensche (INPE, São José, Brazil)

Local Organization Committee

Rong-Gen Cai (Ningbo University)
Bin Chen (Ningbo University)
Chao-Qiang Geng (Hangzhou Institute for Advanced Study, UCAS)
Hong-Sheng Hou (Hangzhou Normal University)
Li Li (Institute of Theoretical Physics, Chinese Academy of Sciences)
Sai Wang (Hangzhou Normal University)
Shao-Jiang Wang (Institute of Theoretical Physics, Chinese Academy of Sciences)
Tao Zhu (Zhejiang University of Technology)

ORGANIZERS & SUPPORTERS

The conference has been funded by the Peng Huanwu Innovation Research Center for Theoretical Physics.
Institute of Theoretical Physics, Chinese Academy of Sciences
Ningbo University
Zhejiang University of Technology
Hangzhou Normal University
Hangzhou Institute for Advanced Study, UCAS

CONFERENCE AGENDA

Timetable:

https://indico.itp.ac.cn/event/417/timetable/#20261106
https://indico.itp.ac.cn/event/417/timetable/#20261106.detailed

Fri. 06/11	Sat. 07/11	Sun. 08/11	Mon. 09/11	Tue. 10/11
	Opening			Departure
	Plenary	Plenary	Parallel	
	Break			
	Plenary	Plenary	Parallel	
Registration	Lunch			
	Parallel	Parallel	Plenary	
	Break			
	Parallel	Parallel	Plenary & Closing	
Dinner	Banquet	Dinner	Dinner	

Saturday Morning / Nov 7, 2026

Location: Grand Ballroom, 1F, VIP Building

Time	Title		Chair
08:00 - 08:30	Opening Ceremony		Bin Chen
Time	**Title**	**Speaker**	**Chair**
08:30 - 09:15	A FAST View of Fast Radio Bursts	Di Li	Li Li
09:15 - 10:00	The BINGO-ABDUS project: DM and DE cosmological problem with a possible description in field theory	Elcio Abdalla	
10:00 - 10:30	Photo / Break		
10:30 - 11:15	Physics and Astrophysics of Merging Compact Binaries	Dong Lai	Zong-Kuan Guo
11:15 - 12:00	Love is in the air [online]	Sumanta Chakraborty	
12:00 - 14:00	Lunch		

Saturday Afternoon / Nov 7, 2026

Parallel Session 1: Astrophysics

Location: Grand BallroomA, 1F, VIP Building

Time	Title	Speaker	Chair
14:00 - 14:30	GW Astronomy with TianQin	Yi-Ming Hu	Yun-Long Zhang
14:30 - 15:00	Clock Noise Suppression in Space-Based Gravitational Wave Detection	Yujie Tan	
15:00 - 15:30	Gravitational-Wave Signatures of Source Motion: Probing Dynamical Environments and Merger Recoils	Li Jin	
15:30 - 16:00	Nonlinear Quasinormal Modes in the Ringdown of GW250114: Observational Evidence for Nonlinear Gravitational Waves	Yifan Wang	
16:00 - 16:30	Break		
16:30 - 17:00	Astrophysical lessons from merging binary black holes: gap and highly spinning subpopulation	Tong Hui	Tao Yang
17:00 - 17:30	Black hole ringdown seen in photon polarization swings	Yehui Hou	
17:30 - 18:00	A continuous wave window into neutron star structure	Ayush Hazarika	
19:00 - 21:00	Conference Dinner		

Parallel Session 2: Cosmology

Location: Lotus Room, 1F, VIP Building

Time	Title	Speaker	Chair
14:00 - 14:30	Modified gravity and the cosmological tensions	Gen Ye	Shao-Jiang Wang
14:30 - 15:00	Tomography of cosmic birefringence induced by 3-form dark energy	Kohei Kamada	
15:00 - 15:30	Can Distance Duality Violation Save Late-time Solutions to the Hubble Tension?	Yashi Tiwari	
15:30 - 16:00	Updated Constraints on Infrared Cutoff Models and Implications for CMB-BAO Tension	Ujjwal Kumar Upadhyay	
16:00 - 16:30	Break		
16:30 - 17:00	Cosmological studies with cosmic microwave background and radio observations	Chang Feng	Qiyuan Pan
17:00 - 17:30	Luminal scalar-tensor theories via couplings to photons	Arina Shtennikova	
17:30 - 18:00	Human–AI Collaboration-Driven Cosmology Research	Jiajun Zhang	
19:00 - 21:00	Conference Dinner		

Parallel Session 3: Gravity

Location: Osmanthus Room, 1F, VIP Building

Time	Title	Speaker	Chair
14:00 - 14:30	Quantum geometry effects in quantum field theory: Hamiltonian constraint generates gravity-matter entanglement in spherically symmetric loop quantum gravity	Gaoping Long	Tao Zhu
14:30 - 15:00	Quantum Gravity Corrections: From Background Dynamics to Cosmological Perturbations	Hongguang Liu	
15:00 - 15:30	Quantum Damping of Cosmological Shear: A New Prediction from Loop Quantum Cosmologies	Wencong Gan	
15:30 - 16:00	A loop quantum gravity inspired effective action in spherically symmetric background and its applications	Hongwei Tan	
16:00 - 16:30	Break		
16:30 - 17:00	Regular ultracompact objects as polymerized vacuum solutions	Ioannis Soranidis	Fu-Wen Shu
17:00 - 17:30	Scalarization of Bardeen spacetime	Long-Xing Huang	
17:30 - 18:00	The complex conformal Kähler structure of type-D spacetimes	Haoran Xu	
19:00 - 21:00	Conference Dinner		

Sunday Morning / Nov 8, 2026

Location: Grand Ballroom, 1F, VIP Building

Time	Title	Speaker	Chair
08:30 - 09:15	Modeling extreme mass-ratio inspirals in astrophysical environments	Huan Yang	Wen Zhao
09:15 - 10:00	Relic Gravitational Waves from Cosmic Domain Walls	Dmitry Gorbunov	
10:00 - 10:30	Break		
10:30 - 11:15	Gravity/thermodynamics correspondence via black hole shadows	Shao-Wen Wei	Yu-Xiao Liu
11:15 - 12:00	Prospects of Experimental Gravity with Black Hole Imaging	Prashant Kocherlakota	
12:00 - 14:00	Lunch		

Sunday Afternoon / Nov 8, 2026

Parallel Session 1: Astrophysics

Location: Grand BallroomA, 1F, VIP Building

Time	Title	Speaker	Chair
14:00 - 14:30	A new window for astrophysics from the lunar orbit	Xuelei Chen	Chang Feng
14:30 - 15:00	Cosmological forecast from bispectrum of 21cm intensity mapping	Yu Sang	
15:00 - 15:30	A Designer's Guide to Lunar Far-Side Interferometer Array: Power Spectrum Measurement and Cosmological Information in the Dark Ages	Yuewei Wen	
15:30 - 16:00	RadioSkySim: A Flexible and Scalable Python Framework for Radio-Astronomical Sky Simulation [online]	Luciano Barosi	
16:00 - 16:30	Break		
16:30 - 17:00	Measuring Geometric Distances Using Interferometry and Reverberation Mapping of Broad-line Regions	Yan-Rong Li	Yue-Lin Sming Tsai
17:00 - 17:30	Too Quiet to Be Ordinary: Little Red Dots	INDU KALPA DIHINGIA	
17:30 - 18:00	Revisiting PBH Accretion, Evaporation and Their Cosmological Consequences [online]	JITUMANI KALITA	
18:00 - 20:00	Dinner		

Parallel Session 2: Cosmology

Location: Lotus Room, 1F, VIP Building

Time	Title	Speaker	Chair
14:00 - 14:30	From Ultralight to Macroscopic Dark Matter: A Window into the Dark Sector with Gravitational Waves	Andrew Miller	Jun Zhang
14:30 - 15:00	Mapping the ALPs: A Naturalness Map for Axions and ALPs	Andrew Fowlie	
15:00 - 15:30	Audible curvaton: modulated phase transition as the origin of large-scale curvature perturbations and gravitational wave anisotropies	Wenyuan Ai	
15:30 - 16:00	Scalar Induced Gravitational Waves Probing Phase Transitions in the Standard Model and Beyond	Peizhi Du	
16:00 - 16:30	Break		
16:30 - 17:00	Tracing out massive fields in cosmology	Guanhao Sun	Peizhi Du
17:00 - 17:30	How Does a Thermal Medium Affect Primordial Gravitational Waves?	Atsuhisa Ota	
17:30 - 18:00	Revisiting Primordial Black Hole Formation from Primordial Gravitational Waves	Zhi-Zhang Peng	
18:00-20:00	Dinner		

Parallel Session 3: Gravity

Location: Osmanthus Room, 1F, VIP Building

Time	Title	Speaker	Chair
14:00 - 14:30	Learning quark-gluon plasma properties holographically with neural ODEs	Song He	Xian Gao
14:30 - 15:00	Timelike Entanglement First Law and Linearized Field Equations in Higher Curvature Gravity	Jia-Rui Sun	
15:00 - 15:30	Nash Equilibrium from Quantum-Field Entanglement	Hao Xu	
15:30 - 16:00	Semileptonic $B\to D$ and $B_ s\to D_S$ decays in the AdS/QCD Softwall model	Miguel Angel Martin Contreras	
16:00 - 16:30	Break		
16:30 - 17:00	Diagonally gauged anomaly-free 6D supergravities and their vacua	Yi Pang	Yu-Sen An
17:00 - 17:30	Can higher derivatives resolve the black-hole singularity?	Breno Loureiro Giacchini	
17:30 - 18:00	Static Vacuum Geometry Determines Gravitational Collapse and Cosmology	Cong Zhang	
18:00-20:00	Dinner		

Monday Morning / Nov 9, 2026

Parallel Session 1: Astrophysics

Location: Grand BallroomA, 1F, VIP Building

Time	Title	Speaker	Chair
08:30 - 09:00	Shadow of rotating black hole surrounded by dark matter	Haiyuan Feng	Xiao-Mei Kuang
09:00 - 09:30	Torsion-Induced Four-Fermion Interactions in Gravitational Collapse	Sagar Kumar Maity	
09:30 - 10:00	Antimatter in the universe and Galaxy [online]	Aleksandr Dolgov	
10:00 - 10:30	Break		
10:30 - 11:00	Meissner Effect and Kerr/CFT Holography of Extremal Kerr–Bertotti–Robinson Black Holes [online]	Siahaan Haryanto Mangaratua	Hai-Shan Liu
11:00 - 11:30	Neutron stars more compact than black holes	Shoulong Li	
11:30 - 12:00	A Neutron Star Hidden Inside a Black Hole	Chen Tan	
12:00 - 14:00	Lunch		

Parallel Session 2: Cosmology

Location: Lotus Room, 1F, VIP Building

Time	Title	Speaker	Chair
08:30 - 09:00	The Generation and Detection of Chiral Gravitational Wave Background	Yun-Long Zhang	Shaoqi Hou
09:00 - 09:30	A Template-Based Search for Large-Scale-Structure--Correlated Anisotropy in the Nanohertz Gravitational-Wave Background Using the Public NANOGrav 15-Year Data Set	Yun Fang	
09:30 - 10:00	A unified framework to study f-family of modified gravity theories [online]	Saikat Chakraborty	
10:00 - 10:30	Break		
10:30 - 11:00	Resolving the Cosmological ^{7}Li Abundance Anomaly via Baryon Emission from Evaporating Primordial Black Holes	Elena Arbuzova	Jie Yang
11:00 - 11:30	Inflation from Entropy: Inflationary Solutions in the Gravity from Entropy Framework	Udaykrishna Thattarampilly	
11:30 - 12:00	A Non Singular Cyclic Universe from Modified Gravity	Dhiraj Kuniyal	
12:00 - 14:00	Lunch		

Parallel Session 3: Gravity

Location: Osmanthus Room, 1F, VIP Building

Time	Title	Speaker	Chair
08:30 - 09:00	Bianchi IX dynamics with a phantom field - a new type of BKL oscillations	Alexey Toporensky	Wei-Jia Li
09:00 - 09:30	Quasinormal Modes Decode Kasner Scaling inside Black Holes	Zi-Qing Xiao	
09:30 - 10:00	On the absence of inner horizons for anisotropic black holes	Yuxuan Peng	
10:00 - 10:30	Break		
10:30 - 11:00	Characteristic initial value problem and formation of black hole	Xiaoning Wu	Gaoping Long
11:00 - 11:30	Thermodynamics and chaotic orbits for semiclassical black hole with quantum anomaly correction	Yu-Sen An	
11:30 - 12:00	Thermodynamics of Kerr-Bertotti-Robinson black hole	Li Hu	
12:00 - 14:00	Lunch		

Monday Afternoon / Nov 9, 2026

Location: Grand Ballroom, 1F, VIP Building

Time	Title	Speaker	Chair
14:00 - 14:45	New type of SVT theory via disformal transformation	Sergey Mironov	Song He
14:45 - 15:30	Null String Theory	Mohammad M. Sheikh-Jabbari	
15:30 - 16:00	Break		
16:00 - 16:45	Testing the Dark Sector at Fixed H0 and S8: The Cosmological Consistency Triangle	Amare Abebe	Jieci Wang
16:45 - 17:30	Conversations between Extreme Physical Scales	Lerothodi Leonard Leeuw	
17:30 - 18:00	Closing Ceremony		Shao-Jiang Wang
18:00 - 20:00	Dinner		

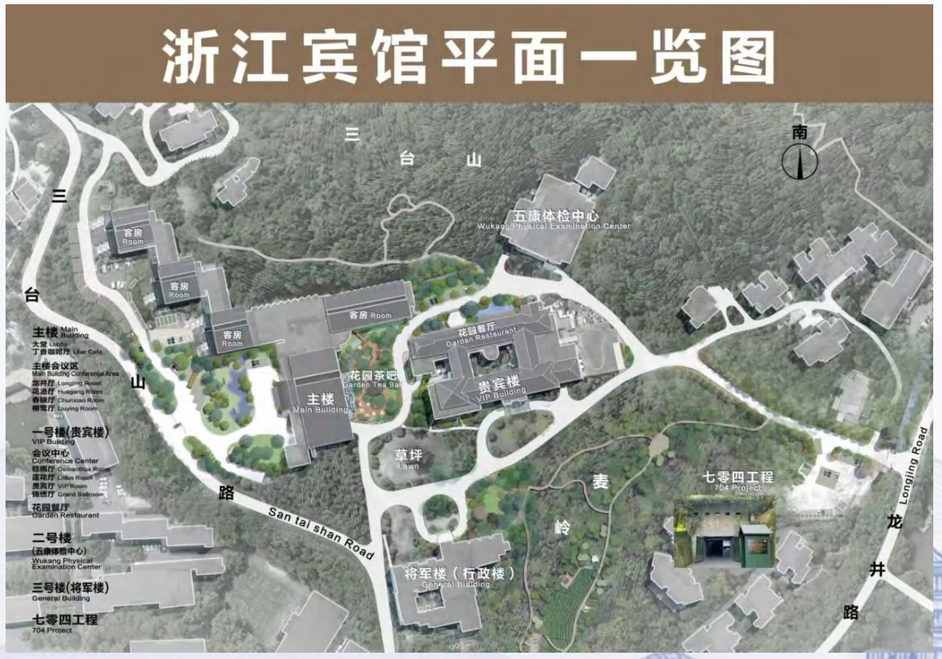
REGISTRATION

Registration Time:
November 6: 10:00 - 22:00
November 7-9: 08:00 - 12:00, 13:30 - 18:00

Registration Place:
The lobby on the first floor of the main building at Zhejiang Hotel.

Registration Fee: 2000CNY
Scan the QR code at the registration desk on WeChat or pay via POS machine, cash is not accepted. (For official card reimbursement, bind the official card to WeChat in advance)
微信扫描报到台二维码或刷 POS 机支付，不接受现金。（需使用公务卡报销人员，请提前微信绑定公务卡）

Signage Map for Conference Center and Hotel



CONFERENCE SERVICES

Conference Venue Information / 会议场地信息

Venue Type	Name & Location	Purpose
Main Lecture Hall& Parallel Session Hall 1 主会场及分会场 1	Grand Ballroom/Grand BallroomA, 1F, VIP Building 酒店贵宾楼 1 层锦绣厅 / 锦绣厅 A	Main Lecture Hall: Opening Ceremony, Plenary Session, Closing Ceremony The mornings of November 7 and 8, and the afternoon of November 9. Parallel Session 1: Astrophysics The afternoons of November 7 and 8, and the morning of November 9. **主会场：**开幕式、特邀报告、闭幕式 11 月 7 日和 8 日上午、11 月 9 日下午 **分会场 1：天体物理** 11 月 7 日和 8 日下午、11 月 9 日上午
Parallel Session Hall 2 分会场 2	Lotus Room, 1F, VIP Building 酒店贵宾楼 1 层莲花厅	Parallel Session 2: Cosmology The afternoons of November 7 and 8, and the morning of November 9. **分会场 2：宇宙学** 11 月 7 日下午、11 月 8 日下午、11 月 9 日上午
Parallel Session Hall 3 分会场 3	Osmanthus Room, 1F, VIP Building 酒店贵宾楼 1 层桂雨厅	Parallel Session 3: Gravity The afternoons of November 7 and 8, and the morning of November 9. **分会场 3：引力** 11 月 7 日下午、11 月 8 日下午、11 月 9 日上午
VIP lounge 贵宾室	VIP lounge, 1F, VIP Building 酒店贵宾楼 1 层贵宾室	VIP lounge for Special Invitees During the Conference 会议期间特邀嘉宾休息室
Parking Information 停车信息	Parking lot of Zhejiang Hotel 浙江宾馆酒店停车	For participants driving to the venue (Before leaving the hotel, please scan the parking QR code at the venue entrance.) 供自驾参会人员使用，离开时，请扫描会场门口停车二维码

Conference Accommodation Information / 会议住宿信息

Hotel	Address	Price
ZHEJIANG HOTEL 浙江宾馆	Zhejiang Hotel, 278 Santai Shan Road, Xihu District, Hangzhou City, Zhejiang Province, China Tel: 0571-87180808	Standard Room 500RMB/Room/Night

Conference Dining Information / 会议用餐信息

Meals	Name & Location	Time
Breakfast	Provided at the accommodation hotel Lilac Cafe, 2F, Main Building 住宿酒店提供 酒店主楼 2 层丁香咖啡厅	06:30-10:00
Lunch	Lilac Cafe, 2F, Main Building 酒店主楼 2 层丁香咖啡厅	12:00-14:00
Dinner	Lilac Cafe, 2F, Main Building 酒店主楼 2 层丁香咖啡厅	18:00-20:00
Conference Dinner on November 7th	Grand Ballroom, 1F, VIP Building 酒店贵宾楼 1 层锦绣厅	19:00-21:00

Note: Please present your meal vouchers prior to dining.**（请凭餐券用餐）**
For the Conference Dinner, please present your conference pass to dine.

Transportation

Location of Zhejiang Hotel:
278 Santai Shan Road, Xihu District, Hangzhou City, Zhejiang Province, China

1. From Hangzhou International Airport (HGH) to Zhejiang Hotel
1.1 By taxi: 35~40 km, 1 hour, 70~100 CNY
1.2 By public transport: Metro Line 19 (19 号线) from Airport Station to Wensanlu (文三路) Station (0.5 hour), and then take a taxi to the hotel (5 km, 20 mins, 20 CNY)

2. From Hangzhou High-Speed Railway Stations to Zhejiang Hotel
2.1 Hangzhou East Railway Station
2.1.1 By taxi: 13~20 km, 30~50 mins, 30~50 CNY
2.1.2 By public transport: Metro Line 1 (1 号线) > West Lake Cultural Square Station (西湖文化广场站) > Metro Line 3 (3 号线) > Huanglong Sports Center Station (黄龙体育中心西站) > Bus Line 197 > Damailing Station (大麦岭站)
2.2 Hangzhou West Railway Station
2.2.1 By taxi: 20~30 km, 40-50 mins, 30~50 CNY
2.2.2 By public transport: Metro Line 19 (19 号线) > Wensanlu Station (文三路站) > Taxi to the hotel (5 km, 20 mins, 20 CNY)
2.3 Hangzhou South Railway Station
2.3.1 By taxi: 20~30 km, 40~60 mins, 40~60 CNY
2.3.2 By public transport: Metro Line 5 (5 号线) > Jiangchenglu Station (江城路站) > Taxi to the hotel (7 km, 30 mins, 20 CNY)

Contacts

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For foreign matter: Junyu Luo (罗隽彧 : luojunyu@nbu.edu.cn) from Ningbo University

NOTES