



**The 2nd Sino-Thai Workshop on Nuclear  
and Particle Physics**

**第二届中-泰核物理与粒子物理国际研讨会**

**Booklet (会议手册)**

**July 7-11, 2025, Shiyao, China**  
**<https://indico.ihep.ac.cn/event/25502/>**

# INTRODUCTION

The 2<sup>nd</sup> Sino-Thai Workshop on Nuclear and Particle Physics (STWP2025) aims to bring together physicists from various regions to exchange their expertise and insights in nuclear and particle physics, promote collaborative research and education in the field, and leverage this opportunity to support the development of physics disciplines in the universities affiliated with the CCNU consortium under the Teacher Education Collaborative Quality Improvement Program. In addition, the workshop will also serve as a window to showcase the charm of Shiyan, allowing participants to appreciate the beautiful natural scenery and the profound cultural heritage of Wudang Mountain as a sacred Taoist site.

## 大会简介

第二届中-泰核物理与粒子物理国际研讨会（STWP2025）旨在汇聚来自不同地区的物理学家，促进他们在核物理和粒子物理领域的专业知识和见解交流，推动该领域的合作研究与教育，并借此契机助力师范教育协同提质计划华中师范大学组团各高校物理学科的发展。此外，研讨会也将成为展示十堰魅力的窗口，让与会者领略当地秀美的自然风光以及作为道教圣地的武当山所蕴含的深厚文化底蕴。

# SCIENTIFIC PROGRAM

Monday, July 7 (Main Lobby, Wudang International Hotel)	
Registration and Check-in	
18:00-21:00	Dinner (Swiss Restaurant on First Floor)

Tuesday, July 8 (Puli Hall on Second Floor)			
Chair: Daicui Zhou			
8:30-8:50	Opening Remarks		
Chair: Yugang Ma			
Time	Speaker	Affiliation	Presentation Title
8:50-9:20	Nu Xu	Central China Normal University	Recent Results from RHIC Beam Energy Scan
9:20-9:50	Christoph Herold	Suranaree University of Technology	Dilepton and Pion Emission as Probes of Chiral Phase Dynamics
9:50-10:30	Workshop Photo + Tea Break		
Chair: Qiang Zhao			
10:30-11:00	Bing-Song Zou	Tsinghua University	Exotic hadrons with hidden strangeness
11:00-11:30	Pornrad Srisawad	Science Naresuan University	Net-Proton Number Fluctuations in Au+Au Collisions at $\sqrt{s_{NN}} = 3.0\text{--}39.0$ GeV Using the UrQMD Model
11:30-12:00	Defu Hou	Central China Normal University	QCD matter under extreme conditions
12:00-12:30	Yanbing Wei	Central China Normal University	QCD light-cone distribution amplitudes of heavy mesons from

			boosted HQET
12:30-14:00	Lunch (Swiss Restaurant on First Floor)		
Chair: Guo-Liang Ma			
14:00-14:30	Supagorn Rugmai	Synchrotron Light Research Institute	Development of Accelerator and Beamline components and AI-assisted Data Analysis systems for the Thai Synchrotron
14:30-15:00	Heng-Tong Ding	Central China Normal University	Probing Meson Structure via Lattice QCD: EMFF at high $Q^2$ and GPD
15:00-15:30	Xiaozhi Bai	University of Science and Technology of China	Quarkonium Production Measurements with ALICE at the LHC
15:30-16:00	Tea Break		
Chair: Zhiming Li			
16:00-16:20	Taylor Yan	Synchrotron Light Research Institute	muCool: Phase Space Compression of Positive Muon Beam
16:20-16:40	Wiriya Ruangyoo	Suranaree University of Technology	Interpretation of $\$P\_c\$$
16:40-17:00	Ming-Xiao Duan	Guizhou Normal University	The feed-down phenomenon and the photoproduction of $P_c$ states
17:00-17:20	Arvind Ramnarayan Singh	Hanjiang Normal University	Integrating Renewables, Electric Vehicles, and Distributed Resources: The Role of Intelligent EMS in Next-Generation Electrical Systems

17:20-17:40	Wenjie Cheng	Hanjiang Normal University	Making Nano Coatings Stronger and Tougher: The Case of VN/TiN-Ni Layers
18:30-21:00	<b>Banquet (Boyue Hall on Second Floor)</b>		

Wednesday, July 9			
Group/Free Discussions			
18:00-21:00	<b>Dinner (Swiss Restaurant on First Floor)</b>		

Thursday, July 10 (Puli Hall on Second Floor)			
Chair: Yupeng Yan			
Time	Speaker	Affiliation	Presentation Title
8:30-9:00	Weijie Fu	Dalian University of Technology	QCD phase diagram at high baryon densities
9:00-9:30	Sampart Cheedket	Walailak University	The energy dependent cross section of $e^+e^- \rightarrow \bar{B}B$ in $\Lambda^3P_0$ quark model
9:30-10:00	Jinlong Zhang	Shandong University	High energy spin physics at RHIC
10:00-10:30	Tea Break		
Chair: Hongxi Xing			
10:30-11:00	Narumon Suwonjandee	Chulalongkorn University	JUNO at Chulalongkorn University
11:00-11:30	Hao Qiu	Chinese Academy of Sciences	Huizhou Hadron Spectrometer (HHaS)
11:30-12:00	Xin-Qiang Li	Central China Normal University	Sum Rules for Semi-leptonic $b \rightarrow c$ & $b \rightarrow u$ Decays

12:00-12:30	Xiaofeng Wang	Shandong University	Recent UPC Results from RHIC-STAR
12:30-14:00	Lunch (Swiss Restaurant on First Floor)		
Chair: Weijie Fu			
14:00-14:30	Zhongbao Yin	Central China Normal University	ALICE upgrades for LHC Run 4 and beyond
14:30-15:00	Hua Zheng	Shanxi Normal University	Pseudorapidity density distributions of charged particles and transverse momentum spectra of identified particles in pp collisions in PACIAE 4.0 model
15:00-15:30	Apiwit Kittiratpattana	Suranaree University of Technology	(Hyper)nuclei Formation in Pion-induced Reactions with $\sqrt{s_{\mathrm{lab}}} = 1.7$ GeV/c
15:30-16:00	Tea Break		
Chair: Shusu Shi			
16:00-16:30	Sheng-Qin Feng	China Three Gorges University	Spin Polarization and Anomalous Magnetic Moment in a (2 + 1)-flavor NJL model in the magnetized background
16:30-17:00	Kai Xu	Suranaree University of Technology	Helicity amplitudes of N(1520) and N(1535) resonances including pentaquark components
17:00-17:30	Shijun Mao	Xi'an Jiaotong University	QCD phase structure under external electromagnetic fields

17:30-18:00	Shuai Yang	South China Normal University	Recent measurements of photoproduced vector mesons in ultraperipheral Pb+Pb collisions using the CMS detector
18:00-21:00	<b>Dinner (Swiss Restaurant on First Floor)</b>		

Friday, July 11 (Puli Hall on Second Floor)			
Chair: Prapun Manyum			
Time	Speaker	Affiliation	Presentation Title
8:30-9:00	Dingyu Shao	Fudan University	Effective field theory and precision jet physics
9:00-9:30	Zheng Zhao	Suranaree University of Technology	Study of $1^{--} P$ wave charmoniumlike and bottomoniumlike tetraquark spectroscopy
9:30-10:00	Ruiqin Wang	Qufu Normal University	Productions of $\Lambda^3_{\Lambda} H$ , $\Lambda^4_{\Lambda} H$ and $\Lambda^4_{\Lambda} He$ in different coalescence channels in Au-Au collisions at $\sqrt{s_{NN}}=3$ GeV
10:00-10:30	Tea Break		
Chair: Daimei Zhou			
10:30-11:00	Attaphon Kaewsnod	Suranaree University of Technology	Study of the $\Delta(1232)$ resonance substructure via helicity amplitudes in the

			$p\gamma^* \rightarrow \Delta(1232)$ transition
11:00-11:30	Zhilei She	Wuhan Textile University	Coalescence production of exotic states with three configurations in high-energy nuclear collisions
11:30-11:50	Thiranat Bumnedpan	Walailak University	Light nuclei production in a dynamical model for a QCD phase transition
11:50-12:10	Anke Lei	Central China Normal University	Production of open-charm hadrons in high-energy nuclear collisions
12:10-12:30	<b>Closing Section</b>		
12:30-14:00	<b>Lunch (Swiss Restaurant on First Floor)</b>		



# 教育部师范教育协同提质计划

## 物理学发展推进会

7月9日 星期三（汉江师范学院图书馆一号会议室）			
主持人：王绍明			
8:40-9:00	领导致辞		
主持人：欧修龙			
时间	报告人	工作单位	报告题目
9:00-9:30	胡响明	华中师范大学	物理师范专业的建设、认证与整改
9:30-10:00	殷喜喜	贵州师范大学	学科共同体+职前职后贯通：为民族地区培养卓越物理教师
10:00-10:30	刘韬容	南宁师范大学	赛育融合，协同赋能：以高水平学科竞赛驱动物理学师范生培养提质增效
10:30-10:50	合影+茶歇		
主持人：王绍明、欧修龙			
10:50-11:50	专题研讨：师范类优师计划及师范类人才培养方案		
12:00-13:00	午餐（汉江师范学院稻香园餐厅三楼）		

### 说明：

1. 参会范围说明：本次推进会仅限协同提质计划7所合作高校的相关代表参加，国际学术会议的其他代表请无需参与。
2. 请参加推进会的各单位代表于7月9日上午8:00整在武当国际酒店正门集合，统一乘坐会议大巴前往汉江师范学院参会。

# ORGANIZING COMMITTEE

Heng-Tong Ding (丁亨通, CCNU), Zhiming Li (李治明, CCNU/HJNU, Co-Chair), Ayut Limphirat (SUT, Co-Chair), Xiulong Ou (欧修龙, HJNU), Guangyou Qin (秦广友, CCNU), Changcheng Shi (史长城, HJNU), Shusu Shi (施梳苏, CCNU), Shaoming Wang (王绍明, HJNU), Xin-Nian Wang (王新年, CCNU), Yaping Wang (王亚平, CCNU), Yuanfang Wu (吴元芳, CCNU), Yupeng Yan (SUT), Daimei Zhou (周代梅, CCNU, Co-Chair)

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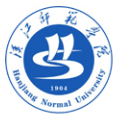
We're here to help!

If you have any questions or need support,  
please don't hesitate to contact us.

## Notes

## Notes

## Notes



**Host Institutes: Central China Normal University,  
Hanjiang Normal University,  
and Suranaree University of Technology (Thailand)**

**会议主办单位：华中师范大学、汉江师范学院、  
泰国苏兰拉里理工大学**

