"西子"前沿核物理研讨会 2024 West lake workshop on nuclear physics 2024



Oct. 18-20, 2024

The Physics Department at Zijingang Campus Zhejiang University, Hangzhou



The workshop is titled "西子" 前沿核物理研讨会 2024 (West lake workshop on nuclear physics 2024). This year, both theorists and experimentalists, who are working on strong fields and rotation in QCD and related systems, get together to discuss recent topics.

• Workshop website and Wechat group



Valid until 10/21 and will update upon joinin

https://indico.cern.ch/event/1439383/overview

- WiFi options: <u>ZJU-guest</u> encouraged for domestic phone number holders, <u>QCD-guest</u>, <u>eduroam</u>
- Workshop Date: Oct. 18-20, 2024
- Workshop venue: 浙江大学紫金港校区海纳苑 8 幢 215 报告厅 Room 215 Haina BLDG 8, Zijingang Campus

Organizers

Koichi Hattori (Zhejiang University)

Xu-Guang Huang (Fudan University)

Qiye Shou (Fudan University)

Workshop secretary

Ms. Peng Jia (Zhejiang University)





Phone: 13395716329, Email: <u>172810734@qq.com</u>

Program

Oct. 18

8:30	Opening remarks		
Chair: Pengfei Zhuang			
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8:45 -9:30	Subhash Singha	Charge-dependent directed flow measurements from RHIC	
9:30-10:15	Chiho Nonaka	Electric Conductivity of QCD Matter in high-energy heavy-Ion Collisions	
10:15	Break		
Chair: Di-Lun Yang			
10:45-11:30	Takafumi Niida	Polarization measurements in heavy-ion collisions	
11:30-12:15	Li Yan	Weak magnetic effect in quark-gluon plasma	
12:15	Lunch		
Chair: Koichi Hattori			
14:00-14:45	Shi Pu	Spin hydrodynamics and causality problem	
14:45-15:30	Masaru Hongo	Hydrodynamic approach to spin relaxation in quark-gluon plasma	
15:30	Break		
	Chair: Hidetoshi Taya		
16:00-16:45	Shu Lin	Radiative corrections to spin polarization in off-equilibrium medium	
16:45-17:30	Hidefumi Matsuda	Study of 3+1D Spacetime Evolution of Glasma in Relativistic Heavy-Ion Collisions	
18:30	Workshop dinner		

Oct. 19

Chair: Qiye Shou		
8:30 -9:15	Xiangjin Kong	Quantum control of nuclei using novel x-ray sources
9:15-10:00	Meng Xiao	Energy correlator measurements in CMS
10:00	Break	
Chair: Mei Huang		
10:30-11:15	Jie Zhao	Strong-field induced reaction in UPC
11:15-12:00	Hidetoshi Taya	Opportunities of strong-field physics in intermediate-energy heavy-ion collisions
12:00	Lunch	
		Chair: Shu Lin
14:00 -14:45	Kohei Kamada	Chiral magnetohydrodynamics in the early Universe cosmology
14:45-15:30	Di-Lun Yang	Chiral transport phenomena in core collapse supernovae
15:30	Break	
Chair: Xu-Guang Huang		
16:00-16:45	Yoshimasa Hidaka	Hamiltonian lattice gauge theory: application to nonequilibrium and dense QCD matter
16:45-17:15	Jun-Xia Chen	Holographic study of deconfinement phase transition and heavy quarkonium under rotation

Oct. 20

Chair: Takafumi Niida		
8:30-9:15	Chunjian Zhang	Imaging nuclei structure of atomic nuclei in high-energy nuclear collisions
9:15-10:00	Bo Zhou	Clustering structure of light nuclei
10:00	Break	
Chair: Yoshimasa Hidaka		
10:30-11:15	Gaoqing Cao	Interplay between rotation and electromagnetic fields
11:15-12:00	Kazuya Mameda	Sign-inversion of magnetovortical charge from gauge invariant thermodynamics
12:00-12:45	Shuzhe Shi	Quantum real time evolution for emergency of collectivity in the Schwinger model
12:45	Closing remarks	
	Lunch and free discussions	

Participant list

1	Anping Huang	China University of Mining and Technology
2	Baoyi Chen	Tianjin University
3	Bo Zhou	Fudan University
4	Chi Yang	Shandong University
5	Chiho Nonaka	Hiroshima University
6	Chunjian Zhang	Fudan University
7	Cong Yi	University of Science and Technology of China
8		RAJA RAMANNA CENTRE FOR ADVANCED
	DEEPAK SAH	TECHNOLOGY, INDORE
9	Defu Hou	CCNU
10	Di-Lun Yang	Institute of Physics, Academia Sinica
11	Diyu Shen	Fudan University
12	Fei Sun	China Three Gorges University
13	Gaoqing Cao	Sun Yat-sen University
14	Haojie Xu	Huzhou University
15	Hidefumi Matsuda	Zhejiang University
16	Hidetoshi Taya	Keio University
17	Jie Zhao	Fudan university
18	Jin Hu	Fuzhou University
19	Kazuya Mameda	Tokyo University of Science
20		Hangzhou Institute for Advanced Study, University of
	Kohei Kamada	Chinese Academy of Sciences
21	Koichi Hattori	Zhejiang University
22	Li Yan	Fudan University
23	Liang Zheng	China University of Geosciences (CN)
24	Masaru Hongo	Niigata Universiity
25	Mei Huang	University of Chinese Academy of Sciences(UCAS)
26	Meng Xiao	ZJU - Zhejiang University (CN)
27	Navid Abbasi	Lanzhou University
28	Pengfei Zhuang	Tsinghua University
29	Qiye Shou	Fudan University (CN)
30	Sheng-Qin Feng	三峡大学理学院
31	Shi Pu	USTC
32	Shijun Mao	Xi'an Jiaotong University
33	Shinsuke Yoshida	South China Normal University
34	Shu Lin	Sun Yat-sen University

35	Shuo Fang	USTC
36	Shuzhe SHI	Tsinghua University
37	Simin Wang	Fudan University
38	Subhash Singha	Institute of Modern Physics CAS Lanzhou
39	Takafumi Niida	University of Tsukuba
40	Xiangjin Kong	Fudan University
41	Xingyu Guo	South China Normal University
42	Xu-Guang Huang	Fudan University
43	Yang Zhen-Xuan	Fudan University
44	Yiliang Yin	University of Science and Technology of China
45	Yoshimasa Hidaka	YITP
46	Yu−Qian Wu	Fudan University
47	Zhe Fang	Zhejiang University
48	Zhibin Zhu	Fudan university
49	Zhong-Hua Zhang	Fudan University
50	亦点 陈 (Yidian Chen)	Hangzhou Normal University
51	杰 梅	中国科学院大学
52	勋 陈	南华大学
53	硕 林	中国科学技术大学
54	Jun-Xia Chen	Central China Normal University
55	Thierry Valet	Spintec, UGA, CNRS, Grenoble

Local transportation



Hangzhou Xiaoshan airport (杭州蕭山)

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The closest international airport is Hangzhou Xiaoshan airport (杭州蕭山). It takes about one hour from the airport to the campus by taxi, which costs about 200 RMB.

https://surl.amap.com/315ew4cVgMF

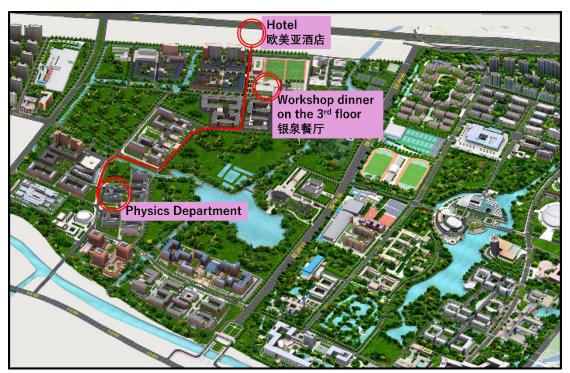
• From the airport to the campus

If you would like to avoid traffic across the city or long taxi, you can take subway Line 19 from the airport to 西溪湿地北 station and then take taxi for the last few kilometers.

https://surl.amap.com/374xJmA1f5Ve

Map of Zijingang (紫金港) campus

https://map.zju.edu.cn/index



• Location of the physics department

Haina BLDG 8, Zijingang Campus 浙江大学紫金港校区西区<u>海纳苑 8 幢</u> Auditorium 215 (2nd floor)



Venue for the workshop dinner

The workshop dinner is held in a restaurant on the third floor of Yinquan cafeteria (食天一隅餐厅), which is close to the hotel(欧美亚酒店). You can find escalators in the middle of the building.

