

# 1st NTHU Physics - NITEP kick-off meeting

date : 1/27-29,2024

place: Media center 1st floor conference room, Sugimoto campus, Osaka Metropliton Univ.

Program of 1st kick-off meeting of National Tsing Hua University (NTHU) Taiwan and Nambu Yoichiro Institute of Theoretical and Experimental Physics (NITEP), Osaka Metropolitan University (OMU) in Physis researchers. We congratulate the signing of the MoU and will have an open discussion on future cooperation.

## 1/27(Sat.)

Introductions	(chair : Chong-Sun Chu)			
15:00	opening : Introduction to NITEP and others	Hiroshi Itoyama	Director of NITEP, OMU	
15:20	Introduction to OMU	Yoshiki Tsunesada	Chairman of Department of Physics, OMU	
15:40	Introduction to NTHU	Pochung Chen	Director of Department of Physics, NTHU	

(cofee break) 16:00-16:20

session 1	(chair: Nobuyuki Kanda)			
16:20	Quantum error correction realized by the renormalization group in scalar field theories	Asato Tsuchiya	Shizuoka U.	
16:40	TBD	Shin Inouye	NITEP,OMU	
17:00	Machine-learning enhanced quantum state tomography and its application to the gravitational wave detectors	Ray Kuang Lee	NTHU	

(short break) 17:20-17:30

session 2	(chair: TBD)			
17:30	Alfvén waves in a homogeneous Beltrami magnetic field	Hideki Ishihara	NITEP,OMU	
17:50	Quantum spacetime and black hole	Chong-Sun Chu	NTHU	
18:10	TBD	Akira Oguri	NITEP,OMU	

session finished at 18:30

Social Dinner	19:00	restaurant 「メタセコイア」 (metasequoia)		
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1/28(Sun.) Free Day

## 1/29(Mon.)

session 3	(chair: TBD)			
9:30	SEE (Sparse Edge Encoder) for natural and medical images	Hsiu Hau Lin	NTHU	
9:50	Visualization and control of photosynthetic processes	Mitsuru Sugisaki	NITEP,OMU	
10:10	Optical probing of operation processes in organic semiconductor devices	Katsuichi Kanemoto	NITEP,OMU	

(cofee break) 10:30-11:00

session 4	(chair: TBD)			
11:00	Studies on $\pi$ -conjugated radical magnets and attempts of thermal transport measurements for submillimeter crystals	Toshio Ono	NITEP,OMU	
11:20	Quantum Gas Mixture And Trapped Ion Experiments at NTHU	Shih-Kuang Tung	NTHU	
11:40	Ultrafast resonant photon emission from a coherently driven single molecule: Dynamical transition from quantum to classical radiation	Satoshi Tanaka	NITEP,OMU	

(lunch) 12:00-13:00

session 5	(chair: TBD)			
13:00	Gravitational wave observation and supporting technologies	Nobuyuki Kanda	NITEP,OMU	
13:20	Astronomy and gravitational wave research in NTHU	Albert Kong	NTHU	
13:40	Galaxy mid-infrared number counts and inferred cosmic star-formation history from the James Webb Space Telescope	Tomo Goto	NTHU	

(cofee break) 14:00-14:30

session 6	(chair: Hiroshi Itoyama)			
14:30	TBD	Masako Iwasaki	NITEP,OMU	
14:50	Flux Compactification and Naturalness	Nobuhito Maru	NITEP,OMU	
15:10	Towards a Holographic Interpretation of the Time Evolution of Quantum Entanglement	Shoichi Kawamoto	J.F.Oberlin U.	
15:30	closing	person of NTHU	NTHU	

close at 15:40

open discussion (You can use conference room until 17:00)

conference room close at 17:00