

# Program

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## 2nd April

<b>Morning Session</b> Chair: Shuichiro Yokoyama		
11:05-11:10	Keisuke Izumi	Opening remark
11:10-12:10	Hironao Miyatake	Unveiling Dark Sector of the Universe with Subaru Hyper Suprime-Cam
12:10-12:30	Chien-Ting Chen	Dark Energy Induced Anisotropy in Cosmic Expansion

## Lunch Break

<b>Afternoon Session 1</b> Chair: Shih-Yuin Lin		
14:00-14:40	Junsei Tokuda	IR obstruction to Lorentz invariant UV completion
14:40-15:00	Yun-Long Zhang	Emergent Dark Universe and the Swampland Criteria
15:00-15:20	Kazuhiro Kogai	Approach to Angular dependent Primordial Non-Gaussianity with Intrinsic Galaxy Alignments
15:20-15:40	Hsiao-Heng Yeh	CMB low multiple anomaly from Hartle-Hawking wave function

## Coffee Break

<b>Afternoon Session 2</b> Chair: Tsung-Che Liu		
16:20-16:40	Rika Ando	Large-scale clustering of HI with cosmological hydrodynamic simulations
16:40-17:00	Shih-Hao Wang	Status, Calibration, and Cosmic Ray Detection of ARIANNA-HCR Station in Antarctica
17:00-18:00	Jiwoo Nam	TBA

## 3rd April

<b>Morning Session 1</b> Chair: Yen Chin Ong		
09:30-10:30	Shih-Yuin Lin	Quantum radiation by an Unruh-DeWitt detector in oscillatory motion
10:30-10:50	Koji Yamaguchi	Partners and quantum information capsule
10:50-11:10	Hsu-Wen Chiang	Would a dynamical super-translated black hole generates non-black-body Hawking radiation?

## Coffee Break

<b>Morning Session 2</b> Chair: Yuichiro Tada		
11:30-11:50	Hiromi Saida	Test of gravity at our galactic central massive black hole
11:50-12:10	Teppey Minoda	A constraint on primordial magnetic fields from 21-cm line observation
12:10-12:30	Sousuke Noda	Superradiant scattering of Alfvén waves and Blandford-Znajek mechanism

## Lunch Break

<b>Afternoon Session 1</b> Chair: Hiromi Saida		
14:00-14:40	Tsung-Che Liu	To distinguish the pseudo-Dirac from Dirac neutrinos by observing the high-energy astrophysical neutrinos
14:40-15:00	Soichiro Hashiba	Gravitational particle creation for dark matter and reheating
15:00-15:20	Tomohiro Nakamura	Stellar instability in screened modified gravity
15:20-15:40	Yen Chin Ong	Generalized Uncertainty Principle, White Dwarfs, and Cosmological Constant

## Coffee Break

<b>Afternoon Session 2</b> Chair: Chulmoon Yoo		
16:00-16:20	Marcus Werner	The isoperimetric problem in Riemannian optical geometry
16:20-16:40	Masataka Tsuchiya	Sonic Point on Photon Surface
16:40-17:40	Norihiro Tanahashi	Separability of Maxwell equation in rotating black hole spacetime and its geometric aspects

## Banquet 18:15-20:15

## 4th April

<b>Morning Session 1</b> Chair: Jiwoo Nam		
09:30-10:30	Tatsuhiko Naka	Experiment to understand the dark matter
10:30-10:50	Yaocheng Chen	SAW filter based multi-band coincidence trigger for impulsive radio from UHECRs under suburban environment
10:50-11:10	Daiki Hashimoto	Research for Dark Matter Annihilation with Gamma-ray Sky and Lower Surface Brightness Galaxies

## Coffee Break

<b>Morning Session 2</b> Chair: Norihiro Tanahashi		
11:30-11:50	Takahiro Terada	Suppression/Enhancement of the Gravitational Waves induced by Curvature Perturbations after Reheating
11:50-12:10	Shin'ichi Nojiri	Gravitational Waves in the Presence of Viscosity
12:10-12:30	Che-Yu Chen	Testing Gravity Theories with Gravitational Waves from Black Hole Perturbations

## Lunch Break (& photo)

<b>Afternoon Session</b> Chair: Keisuke Izumi		
14:00-14:40	Akira Matsumura	Hypothesis testing on the celestial sphere : Bunch-Davies vacuum vs stationary state
14:40-15:00	Chulmoon Yoo	On estimation of PBH abundance
15:00-15:20	Yuichiro Tada	PBH tower in multi-phase inflation
15:20-15:30	Pisin Chen	Summary of workshop