

# **2022 ICRR Master and Doctor Thesis Workshop**

## **Report of Contributions**

Contribution ID: 2

Type: **not specified**

XXXXXXXXXXXXXXXXXXXX **Am/Be**XXXXXXXXXXXXXXXXXXXX **(A study of neutron detection efficiency of Super-Kamiokande using an Am/Be calibration source)**

*Friday, 18 February 2022 09:05 (12 minutes)*

**Presenter:** (WATANABE, SHUHEI), XX XX (Master)

**Session Classification:** Japanese Oral Session 1 (Master)

Contribution ID: 3

Type: **not specified**

XXXXXXXXXXXXXXXXXXXXXXXXXXXX **(Constraining the origin  
of binary black holes probed by gravitational wave  
observations)**

*Friday, 18 February 2022 09:17 (12 minutes)*

**Presenter:** (IWAYA, MASAKI), XXX (Master)

**Session Classification:** Japanese Oral Session 1 (Master)

Contribution ID: 4

Type: **not specified**

**XXXXXXXXSU(5)XXXXXXXXXXXX (A unified model of matter  
into seemingly complete SU(5) multiplets)**

*Friday, 18 February 2022 09:29 (12 minutes)*

**Presenter:** (WATANABE, KEIICHI), XXX (Master)

**Session Classification:** Japanese Oral Session 1 (Master)

Contribution ID: 5

Type: **not specified**

XX (Evaluation of  
the energy scale for the Super-Kamiokande  
Gadolinium Experiment)

*Friday, 18 February 2022 09:41 (12 minutes)*

**Presenter:** (KANEMURA, YUKI), XXX (Master)

**Session Classification:** Japanese Oral Session 1 (Master)

Contribution ID: 6

Type: **not specified**

# **TAx4XX (Study for extension of energy rangy covered by the TAx4 surface detector array)**

*Friday, 18 February 2022 09:53 (12 minutes)*

**Presenter:** (OKIMOTO, NAOYA), XXX (Master)

**Session Classification:** Japanese Oral Session 1 (Master)

Contribution ID: 7

Type: **not specified**

## CTAXXXXXXXXXXSiPMXXXXXXXXXX (Development of SiPM Modules for the CTA Large-Sized Telescopes)

*Friday, 18 February 2022 10:15 (12 minutes)*

**Presenter:** (HASHIYAMA, KAZUAKI), XXXX (Master)

**Session Classification:** Japanese Oral Session 2 (Master and Doctor)

Contribution ID: 8

Type: **not specified**

XX (Free Streaming  
**Length of Axion-Like Particle After Oscillon/I-ball  
Decays)**

*Friday, 18 February 2022 10:27 (12 minutes)*

**Presenter:** (IMAGAWA, KANAME), XX (Master)

**Session Classification:** Japanese Oral Session 2 (Master and Doctor)



Contribution ID: 9

Type: **not specified**

XXXXXXXXXXXXXXXXXXXXXXXXXXXX21cmXXXXXX (Anisotropies in  
Cosmological 21 cm Background by Oscillons/I-balls  
of Ultra-light Axion-like Particle)

*Friday, 18 February 2022 10:39 (12 minutes)*

**Presenter:** (MIYAZAKI, KAZUYOSHI), XXX (Master)

**Session Classification:** Japanese Oral Session 2 (Master and Doctor)

Contribution ID: 10

Type: **not specified**

XXXXXXXXXXXXXXXXXXXXXXXXXXXX (Exploring the  
Frontiers of Low-mass Galaxy Formation over the  
Cosmic History)

*Friday, 18 February 2022 10:51 (20 minutes)*

**Presenter:** (KIKUCHIHARA, SHOTARO), XXXXXX (Doctor)

**Session Classification:** Japanese Oral Session 2 (Master and Doctor)

Contribution ID: 11

Type: **not specified**

**XXX (Detectability of black holes with boson clouds by gravitational wave observation)**

*Friday, 18 February 2022 11:20 (12 minutes)*

**Presenter:** (SUZUKI, RYOTA), XXXX (Master)

**Session Classification:** Japanese Oral Session 3 (Master and Doctor)

Contribution ID: 12

Type: **not specified**

**SK-Gd [XX] (Neutrino event reconstruction algorithm with neutron detection in SK-Gd)**

*Friday, 18 February 2022 11:32 (12 minutes)*

**Presenter:** (MIKI, SHINTARO), [XX][XX] (Master)

**Session Classification:** Japanese Oral Session 3 (Master and Doctor)

Contribution ID: 13

Type: not specified

# **Folded PendulumXXXXXXXXXXXXXXXXXXXXKAGRAXXXXXXXXXXXX (Studies of Active Vibration Isolation System for KAGRA, Large-scale Cryogenic Gravitational wave Telescope, using Folded Pendulum Accelerometer)**

*Friday, 18 February 2022 11:44 (12 minutes)*

**Presenter:** (SUGIYAMA, TAKUMU), XX XX (Master)

**Session Classification:** Japanese Oral Session 3 (Master and Doctor)

Contribution ID: 14

Type: **not specified**

XXXXXXXXXXXXXXXXXXXXXXXXXXXX (Concrete Models and Phenomenologies of Composite Asymmetric Dark Matter)

*Friday, 18 February 2022 11:56 (20 minutes)*

**Presenter:** (KOBAYASHI, SHIN), XXX (Doctor)

**Session Classification:** Japanese Oral Session 3 (Master and Doctor)







Contribution ID: 17

Type: **not specified**

## **Deep Optical Spectroscopic Study on Outflows of Low-Mass Galaxies with $M^* = 10^4 - 10^7 M_\odot$**

*Friday, 18 February 2022 13:54 (12 minutes)*

**Presenter:** (XU, YI), ☒☒ (Master)

**Session Classification:** English Oral Session 1 (master)

Contribution ID: 18

Type: **not specified**

## **Radiative Processes of Charged Particles in Relativistic Turbulence (XXXXXXXXXXXXXXXXXXXXXXXXXX)**

*Friday, 18 February 2022 14:06 (12 minutes)*

**Presenter:** (GOTO, RYOTA), XXX (Master)

**Session Classification:** English Oral Session 1 (master)

Contribution ID: 19

Type: **not specified**

**Study of the Very-High-Energy Gamma-Ray  
Emission from the Center Region of the Milky Way  
and the Performance of the Large-Zenith-Angle  
Technique with the CTA-LST (XXXXXXXXXXCTA-  
LSTXX)**

*Friday, 18 February 2022 14:18 (12 minutes)*

**Presenter:** (ABE, SHOTARO), XX XX (Master)

**Session Classification:** English Oral Session 1 (master)

Contribution ID: 20

Type: **not specified**

## **Time-Dependent Search for Astrophysics Neutrino Point Source in Super-K**

*Friday, 18 February 2022 14:30 (12 minutes)*

**Presenter:** (WANG, XUBIN), 王旭彬 (Master)

**Session Classification:** English Oral Session 1 (master)

Contribution ID: 21

Type: **not specified**

## Imprints on Cosmic Microwave Background by WIMP and Axion (XXXXXXXXXXXXXXXXXXXXXXXXXXXX)

*Friday, 18 February 2022 15:55 (20 minutes)*

**Presenter:** (NAKATSUKA, HIROMASA), XX XX (Doctor)

**Session Classification:** English Oral Session 2 (Doctor)

Contribution ID: 22

Type: **not specified**

## **Sky localization of gravitational wave sources with one-dimensional residual neural network**

*Friday, 18 February 2022 16:15 (20 minutes)*

**Presenter:** (HSIEH, BIN-HUA), 侯斌 (Doctor)

**Session Classification:** English Oral Session 2 (Doctor)

Contribution ID: 23

Type: **not specified**

**Search for UHECR source considering the deflection  
by the galactic magnetic field  
(XX)**

*Friday, 18 February 2022 16:35 (20 minutes)*

**Presenter:** (HIGUCHI, RYO), XXX (Doctor)

**Session Classification:** English Oral Session 2 (Doctor)





Contribution ID: 25

Type: **not specified**

## Search for Neutrinos associated with Solar Flares in Super-Kamiokande



*Friday, 18 February 2022 17:20 (20 minutes)*

**Presenter:** (OKAMOTO, KOUHEI), (Doctor)

**Session Classification:** English Oral Session 3 (Doctor)

Contribution ID: 26

Type: **not specified**

## **A joint analysis of SuperK and T2K's neutrino oscillation**

*Friday, 18 February 2022 17:40 (20 minutes)*

**Presenter:** (XIA, JUNJIE), ☒☒☒ (Doctor)

**Session Classification:** English Oral Session 3 (Doctor)



Contribution ID: 27

Type: **not specified**



*Friday, 18 February 2022 14:50 (1 hour)*

**Presenter:** (SHIBA, HAYATO), ☒☒ (Master)

**Session Classification:** Poster Session

Contribution ID: 28

Type: **not specified**

## **Calibration of energy scale uncertainly based on understanding of Super-Kamiokande detector elements**

*Friday, 18 February 2022 14:50 (1 hour)*

**Presenter:** (SHIMIZU, KOTARO), ☒☒☒ (Master)

**Session Classification:** Poster Session

Contribution ID: 29

Type: **not specified**

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*Friday, 18 February 2022 14:50 (1 hour)*

**Presenter:** (TOMIYA, TAKUYA), XX XX (Master)

**Session Classification:** Poster Session



Contribution ID: **30**

Type: **not specified**



*Friday, 18 February 2022 14:50 (1 hour)*

**Presenter:** (KASHIWAGI, YURI), ☒☒☒ (Master)

**Session Classification:** Poster Session

Contribution ID: **31**

Type: **not specified**

XXXXXXXXKAGRAXXXXXXXXXXXXXXXXXXXX

*Friday, 18 February 2022 14:50 (1 hour)*

**Presenter:** (TAMAKI, MASAHIDE), XX (Master)

**Session Classification:** Poster Session

Contribution ID: 33

Type: **not specified**

**ALPACAXX**  
**(Dynode readout and UV laser calibration for**  
**photomultiplier tubes of ALPACA experiment)**

*Friday, 18 February 2022 14:50 (1 hour)*

**Presenter:** (KAWASHIMA, TERUYOSHI), XXX (Master)

**Session Classification:** Poster Session







Contribution ID: 34

Type: **not specified**



*Friday, 18 February 2022 14:50 (1 hour)*

**Presenter:** (NISHIWAKI, KOSUKE),   (Doctor)

**Session Classification:** Poster Session



Contribution ID: 35

Type: **not specified**



*Friday, 18 February 2022 14:50 (1 hour)*

**Presenter:** (KUSAFUKA, YO), ☒☒ (Master)

**Session Classification:** Poster Session

Contribution ID: 36

Type: **not specified**

## **A Convolutional Neural Network Approach for Cherenkov Event Reconstruction**

*Friday, 18 February 2022 14:50 (1 hour)*

**Presenter:** (XIA, JUNJIE), 张 强 (Doctor)

**Session Classification:** Poster Session



Contribution ID: 37

Type: **not specified**



*Friday, 18 February 2022 14:50 (1 hour)*

**Presenter:** (KANESHIMA, RYOTA), ☒☒ (Master)

**Session Classification:** Poster Session