

The third annual conference of Transformative Research Areas (A), “Multimessenger Astrophysics”

Report of Contributions

Contribution ID: 1

Type: **not specified**

Results from the LIGO-Virgo-KAGRA Fourth Observation

Tuesday 18 November 2025 13:15 (15 minutes)

Presenter: MORISAKI, Soichiro

Session Classification: A02

Contribution ID: 2

Type: **not specified**

Accurate Estimation of the Spin Distribution of Binary Black Holes Using Gravitational-Wave Data

Tuesday 18 November 2025 13:30 (15 minutes)

Presenter: KOBAYASHI, Kazuya

Session Classification: A02

Contribution ID: 3

Type: **not specified**

Black-Hole Ringdown Analysis with LIGO-Virgo-KAGRA O4 Data

Tuesday 18 November 2025 13:45 (15 minutes)

Presenter: SUZUKI, Motoki (ICRR, The University of Tokyo)

Session Classification: A02

Contribution ID: 4

Type: **not specified**

Constraining the Hubble Constant using Cross-Correlation of Gravitational Wave Events

Tuesday 18 November 2025 14:00 (15 minutes)

Presenter: GHOSH, Tathagata

Session Classification: A02

Contribution ID: 7

Type: **not specified**

Neutrino Astronomy: Historical Milestones and Future Directions

Tuesday 18 November 2025 14:30 (30 minutes)

Presenter: KURAHASHI, Neilson

Session Classification: A01: Neutrino 1

Contribution ID: 8

Type: **not specified**

Search for X-ray Transient Counterparts to IceCube Neutrino Alerts with Swift-XRT

Tuesday 18 November 2025 15:00 (20 minutes)

Presenter: MIYAZATO, Yu (Chiba University)

Session Classification: A01: Neutrino 1

Contribution ID: 9

Type: **not specified**

GeV Neutrino Transient Searches with IceCube Upgrade

Tuesday 18 November 2025 15:20 (20 minutes)

Presenter: KOBAYASHI, Yukiho (ICEHAP, Chiba University)

Session Classification: A01: Neutrino 1

Contribution ID: **10**

Type: **not specified**

Status reports on HiZ-GUNDAM

Tuesday 18 November 2025 16:30 (5 minutes)

Presenter: YONETOKU, Daisuke (Kanazawa University)

Session Classification: B02: Hi-Z GUNDAM

Contribution ID: **11**

Type: **not specified**

Detector Design for the Next Generation of IceCube Optical Modules

Tuesday 18 November 2025 15:40 (20 minutes)

Presenter: HOLLNAGEL, Annika

Session Classification: A01: Neutrino 1

Contribution ID: 12

Type: **not specified**

Recent progress in the Development of EAGLE, the Wide-Field X-ray Monitor onboard HiZ-GUNDAM

Tuesday 18 November 2025 16:35 (15 minutes)

Presenter: ARIMOTO, Makoto (Kanazawa University)

Session Classification: B02: Hi-Z GUNDAM

Contribution ID: 13

Type: **not specified**

Super heavy dark matter origin of the PeV neutrino event: KM3-230213A

Tuesday 18 November 2025 16:00 (15 minutes)

Presenter: KAZUONRI, Kohri

Session Classification: A01: Neutrino 1

Contribution ID: 14

Type: **not specified**

Construction and First Evaluation of the HiZ-GUNDAM/EAGLE Optics System Prototype

Tuesday 18 November 2025 16:50 (15 minutes)

Presenter: GOTO, Hatune

Session Classification: B02: Hi-Z GUNDAM

Contribution ID: 15

Type: **not specified**

Improvement of Expected Performance of MONSTER onboard HiZ-GUNDAM satellite

Tuesday 18 November 2025 17:05 (15 minutes)

Presenter: MATSUHARA, Hideo (ISAS, JAXA)

Session Classification: B02: Hi-Z GUNDAM

Contribution ID: **16**

Type: **not specified**

Current status of evaluation of the Kösters prism on HiZ-GUNDAM/MONSTER

Tuesday 18 November 2025 17:20 (15 minutes)

Presenter: HORI, Tomoya (Hiroshima Univ)

Session Classification: B02: Hi-Z GUNDAM

Contribution ID: 17

Type: **not specified**

Current Status of On-board Software for HiZ-GUNDAM

Tuesday 18 November 2025 17:35 (15 minutes)

Presenter: TOGASHI, Takumi (Yamagata University)

Session Classification: B02: Hi-Z GUNDAM

Contribution ID: **18**

Type: **not specified**

Effective Area of the D-Egg Module for the IceCube Upgrade

Presenter: RAMY, Hmaid

Session Classification: Poster & Free discussion

Contribution ID: **19**

Type: **not specified**

Attention for high-energy neutrino alerts at IceCube

Presenter: ASKE, Rosted

Session Classification: Poster & Free discussion

Contribution ID: 20

Type: **not specified**

Evaluation of the angle dependence of the light detection efficiency of the LOM-18 detector for IceCube-Gen2

Presenter: TSUJI, Tomoyuki

Session Classification: Poster & Free discussion

Contribution ID: 21

Type: **not specified**

Search for X-ray transient counterparts for the IceCube neutrino events with MAXI

Presenter: IWAKIRI, Wataru (Chiba University)

Session Classification: Poster & Free discussion

Contribution ID: 22

Type: **not specified**

Development of a tau neutrino based real-time alert stream for IceCube

Presenter: MEIER, Maximilian (Chiba University – ICEHAP)

Session Classification: Poster & Free discussion

Contribution ID: 23

Type: **not specified**

Understanding the Contribution of Optical Signals from the New Photodetector LOM18 for the IceCube-Gen2

Presenter: KASAI, Yujiro

Session Classification: Poster & Free discussion

Contribution ID: 25

Type: **not specified**

Q-ball simulation with IceCube

Presenter: TORIBUCHI, Hiroki (U Chiba)

Session Classification: Poster & Free discussion

Contribution ID: 26

Type: **not specified**

Search for Ultra-Relativistic Magnetic Monopoles

Presenter: DAOYANG, Zhang

Session Classification: Poster & Free discussion

Contribution ID: 27

Type: **not specified**

Shadow charge detectability in large-scale neutrino detectors

Presenter: NICOLAS, MOLLER

Session Classification: Poster & Free discussion

Contribution ID: 28

Type: **not specified**

Optimizing Searches for Long-Duration Gravitational Waves from Low-Mass Compact Binaries Coalescences

Presenter: MURAKAMI, Yasuhiro

Session Classification: Poster & Free discussion

Contribution ID: 29

Type: **not specified**

Parameter estimation for gravitational waves with machine learning and new parameterizations

Presenter: TAKADA, Kazuki

Session Classification: Poster & Free discussion

Contribution ID: 30

Type: **not specified**

Application of machine learning techniques for gravitational wave data analyses

Presenter: TANAKA, Takahiro

Session Classification: Poster & Free discussion

Contribution ID: 31

Type: **not specified**

Multimessenger observations with the Seimei telescope and TriCCS

Presenter: TAGUCHI, Kenta (Okayama Observatory, Kyoto University)

Session Classification: Poster & Free discussion

Contribution ID: 32

Type: **not specified**

Optical Transient Counterpart Search for IceCube Neutrino Multiplet Events

Presenter: TOSHIKAGE, Seiji (Tohoku University)

Session Classification: Poster & Free discussion

Contribution ID: 33

Type: **not specified**

Laguna: An Optical Instrument Complex for the TAO 6.5 m Telescope

Presenter: MATSUBAYASHI, Kazuya

Session Classification: Poster & Free discussion

Contribution ID: 34

Type: **not specified**

Mass Inspection of Photomultiplier Tubes for the IceCube Gen-2 Experiment

Presenter: SENO, Zenta

Session Classification: Poster & Free discussion

Contribution ID: 35

Type: **not specified**

Status report of 1.5m Kanata Telescope

Presenter: KAWABATA, Koji

Session Classification: Poster & Free discussion

Contribution ID: 36

Type: **not specified**

Breakouts of Nascent Wind Bubbles in Pulsar Driven Supernovae

Presenter: MINGXI, Chen

Session Classification: Poster & Free discussion

Contribution ID: 37

Type: **not specified**

Constraints on heavy element production from spectral analysis of a binary neutron star merger

Presenter: MATSUBAYASHI, Yuta

Session Classification: Poster & Free discussion

Contribution ID: 38

Type: **not specified**

KaGErOFU: Observing Gamma-Ray Burst Optical Flashes with an Optical Star Camera System

Presenter: MUNAKATA, YUSUKE (KANAZAWA UNIVERSITY)

Session Classification: Poster & Free discussion

Contribution ID: 39

Type: **not specified**

Non-LTE Ionization Modeling for Helium and Strontium in Neutron Star Merger Ejecta

Presenter: CHIBA, Koya (Tohoku University)

Session Classification: Poster & Free discussion

Contribution ID: 40

Type: **not specified**

Current status of the near-ultraviolet imager SCUID

Presenter: Dr AKITAYA, Hiroshi (Astronomy Research Center, Chiba Institute of Technology)

Session Classification: Poster & Free discussion

Contribution ID: 41

Type: **not specified**

Update on the Multi-messenger Observation Database & Viewer

Presenter: Dr KAWAKUBO, Yuta (Aoyama Gakuin University)

Session Classification: Poster & Free discussion

Contribution ID: 42

Type: **not specified**

Development of a subthreshold transient catalog with MAXI data

Presenter: KATSUMATA, Naoaki

Session Classification: Poster & Free discussion

Contribution ID: 43

Type: **not specified**

Evaluation of the magnetic field structure in the "West bay" of the Crab Nebula through IXPE long observation and simulations

Presenter: GOYA, Kazuho (Hiroshima University)

Session Classification: Poster & Free discussion

Contribution ID: 44

Type: **not specified**

Study of Cosmic Rays in Star-Forming Galaxies using GeV Gamma-Rays

Presenter: OCHI, Hinako

Session Classification: Poster & Free discussion

Contribution ID: 45

Type: **not specified**

The neutrino emission of NGC4151. I. Xray hot corona long term evolution

Presenter: SAMUEL, Banier

Session Classification: Poster & Free discussion

Contribution ID: 46

Type: **not specified**

Systematic analysis on trigger event data of the gamma-ray detector KGD on the KOYOH satellite

Presenter: OKAMOTO, Kanaho (金沢大学)

Session Classification: Poster & Free discussion

Contribution ID: 47

Type: **not specified**

Performance Evaluation of Radiation Detectors Based on Diamond Semiconductors

Presenter: OZAWA, Kaito

Session Classification: Poster & Free discussion

Contribution ID: 48

Type: **not specified**

Long-Term monitoring of Sco X-1 with the Small X-ray Satellite NinjaSat

Presenter: KITA, Takayuki

Session Classification: Poster & Free discussion

Contribution ID: 49

Type: **not specified**

Diamond-detector satellite for charged particle measurements in Earth's Magnetosphere

Presenter: RYOTA, Heibatake

Session Classification: Poster & Free discussion

Contribution ID: 50

Type: **not specified**

Development of KOYOH data archive

Presenter: SUGIZAKI, Mutsumi (Kanazawa University)

Session Classification: Poster & Free discussion

Contribution ID: 51

Type: **not specified**

Development of TeV iron cosmic ray measurement method using Large-Sized Telescope of CTAO

Presenter: MASAKAZE, Mizuno

Session Classification: Poster & Free discussion

Contribution ID: 52

Type: **not specified**

Long-term X-ray and Gamma-ray Variability of the BL Lac Object 1ES 1959+650 from 2015 to 2021

Presenter: SAKURAI, George (Chiba University)

Session Classification: Poster & Free discussion

Contribution ID: 53

Type: **not specified**

Evaluating systematic uncertainties caused by direction discrepancy between a source and IRFs in LST data analysis

Presenter: NGATA, Toya

Session Classification: Poster & Free discussion

Contribution ID: 54

Type: **not specified**

Observation of NGC 1068 with the CTAO Large-Sized Telescope Prototype

Presenter: YI, Yao

Session Classification: Poster & Free discussion

Contribution ID: 55

Type: **not specified**

Data Transfer Test due to SpaceWire Network for HiZ-GUNDAM

Presenter: WATANABE, Keito (Yamagata Univ.)

Session Classification: Poster & Free discussion

Contribution ID: 56

Type: **not specified**

X-ray Irradiation Tests of pnCCD for GRB Observation in the HiZ-GUNDAM

Presenter: TATSURO, Kanenaga

Session Classification: Poster & Free discussion

Contribution ID: 57

Type: **not specified**

Development of on-board software for the image data of MONSTER on HiZ-GUNDAM

Presenter: NIINUMA, Haruaki (Yamagata University)

Session Classification: Poster & Free discussion

Contribution ID: 58

Type: **not specified**

Alignment adjustment with Micro-actuators for Lobster eye optics aboard HiZ-GUNDAM satellite

Presenter: NAGATAKA, Isshin

Session Classification: Poster & Free discussion

Contribution ID: 59

Type: **not specified**

The MONSTER sky simulator

Presenter: VALENTIN, palshin

Session Classification: Poster & Free discussion

Contribution ID: 60

Type: **not specified**

Geant4 simulation for electron background suppression of the wide field view X-ray monitor on HiZ-GUNDAM

Presenter: KUTSUMI, Akito (Kanazawa university)

Session Classification: Poster & Free discussion

Contribution ID: 61

Type: **not specified**

Thermal analysis of the near-infrared telescope on board the HiZ-GUNDAM satellite

Presenter: KUTSUMI, Akito (Kanazawa university)

Session Classification: Poster & Free discussion

Contribution ID: 62

Type: **not specified**

Thermal analysis of the near-infrared telescope on board the HiZ-GUNDAM satellite

Presenter: KAGEYAMA, Rinon

Session Classification: Poster & Free discussion

Contribution ID: 63

Type: **not specified**

Multi-wavelength Emission from Accretion Flows around Isolated Black Holes

Presenter: KOSHIMIZU, Takumi (Tohoku university)

Session Classification: Poster & Free discussion

Contribution ID: 64

Type: **not specified**

Little Red Dots as Potential High-energy Neutrino Sources

Presenter: RIKU, Kuze

Session Classification: Poster & Free discussion

Contribution ID: 65

Type: **not specified**

Proto-neutron star evolution with convection

Presenter: LIAO, Jinkun

Session Classification: Poster & Free discussion

Contribution ID: 66

Type: **not specified**

Theoretical and numerical analysis for growth rate of relativistic tearing instability

Presenter: SUGIMOTO, Kaoru (Yukawa Institute for Theoretical Physics, Kyoto University)

Session Classification: Poster & Free discussion

Contribution ID: 67

Type: **not specified**

Circumbinary Discs as the Origin of Circumstellar Material around Hydrogen-poor Supernovae

Presenter: CHIBA, Ryotaro (National Astronomical Observatory of Japan / Graduate University for Advanced Studies)

Session Classification: Poster & Free discussion

Contribution ID: 68

Type: **not specified**

Optical observations of neutrino-counterpart analogs in the local universe

Wednesday 19 November 2025 09:00 (15 minutes)

Presenter: MAEDA, Keiichi (Kyoto University)

Session Classification: A03: Optical

Contribution ID: 69

Type: **not specified**

Rapid variability in black-hole systems and our efforts for multi-wavelength observations

Wednesday 19 November 2025 09:15 (15 minutes)

Presenter: KIMURA, Mariko

Session Classification: A03: Optical

Contribution ID: 70

Type: **not specified**

Progress on Optical/infrared observations for GW/neutrino sources

Wednesday 19 November 2025 09:30 (15 minutes)

Presenter: TANAKA, Masaomi (Tohoku University)

Session Classification: A03: Optical

Contribution ID: 71

Type: **not specified**

Subaru observations for IC230724A

Wednesday 19 November 2025 09:45 (15 minutes)

Presenter: KIMURA, Shigeo (Tohoku University)

Session Classification: A03: Optical

Contribution ID: 72

Type: **not specified**

A Joint Search for the EM Counterpart to the GW BBH Merger Candidate S250328ae with DECAM and PFS

Wednesday 19 November 2025 10:00 (15 minutes)

Presenter: ZHANG, Haibin (NAOJ)

Session Classification: A03: Optical

Contribution ID: 73

Type: **not specified**

Heavy Elements in Late-Time Kilonova Spectra: Abundance Constraints from GW170817

Wednesday 19 November 2025 10:15 (15 minutes)

Presenter: RAHMOUNI, Salma (Tohoku University)

Session Classification: A03: Optical

Contribution ID: 74

Type: **not specified**

Monte Carlo Simulations of Radiation Mediated Shocks

Wednesday 19 November 2025 10:45 (15 minutes)

Presenter: ITO, Hirotaka (RIKEN)

Session Classification: C02: Gravitational wave 2

Contribution ID: 75

Type: **not specified**

Collapse of rotating massive stars

Wednesday 19 November 2025 11:00 (18 minutes)

Presenter: FUJIBAYASHI, Sho (Tohoku University)

Session Classification: C02: Gravitational wave 2

Contribution ID: 76

Type: **not specified**

Gamma-Ray Burst Jets in Circumstellar Material: Dynamics and Diversity of Transients

Wednesday 19 November 2025 11:18 (18 minutes)

Presenter: HAMIDANI, Hamid (Tohoku University)

Session Classification: C02: Gravitational wave 2

Contribution ID: 77

Type: **not specified**

Late-time Radio Flares in Tidal Disruption Events

Wednesday 19 November 2025 11:36 (18 minutes)

Presenter: MATSUMOTO, Tastuya

Session Classification: C02: Gravitational wave 2

Contribution ID: 78

Type: **not specified**

Dust formation in confined circumstellar material and its impact on kilonova surveys

Wednesday 19 November 2025 11:54 (18 minutes)

Presenter: TAKEI, YUKI (Yukawa Institute for Theoretical Physics, Kyoto University)

Session Classification: C02: Gravitational wave 2

Contribution ID: 79

Type: **not specified**

Theoretical studies on formation mechanism of compact binary stars discovered from Gaia Data Release 3

Wednesday 19 November 2025 12:12 (18 minutes)

Presenter: TANIKAWA, Ataru

Session Classification: C02: Gravitational wave 2

Contribution ID: **80**

Type: **not specified**

Modeling multi-messenger emission from astrophysical objects

Wednesday 19 November 2025 14:00 (20 minutes)

Presenter: ZHANG, Bing Theodore

Session Classification: C01: Neutrino 2

Contribution ID: **81**

Type: **not specified**

CR Propagation Code Project with MHD-Consistent Transport Coefficient Modeling

Wednesday 19 November 2025 14:20 (15 minutes)

Presenter: ISHIZAKI, Wataru (Tohoku University)

Session Classification: C01: Neutrino 2

Contribution ID: 82

Type: **not specified**

Super-PeV Cosmic-rays in Interacting Supernovae: spectrum and composition

Wednesday 19 November 2025 14:35 (15 minutes)

Presenter: EKANGER, Nick (Tohoku University)

Session Classification: C01: Neutrino 2

Contribution ID: 83

Type: **not specified**

Possibility of High Energy Neutrino Production in Super-Eddington Accreting Black Holes

Wednesday 19 November 2025 14:50 (15 minutes)

Presenter: KAWANAKA, Norita

Session Classification: C01: Neutrino 2

Contribution ID: 84

Type: **not specified**

1D MHD, Lagrange Particle, and Radiative Transfer Hybrid Simulations of Multimessenger Signals from Relativistic Shock Waves

Wednesday 19 November 2025 15:05 (15 minutes)

Presenter: KUSAFUKA, Yo (ICRR, The University of Tokyo)

Session Classification: C01: Neutrino 2

Contribution ID: 85

Type: **not specified**

Multi-wavelength emission associated with X-ray flares of GRBs

Wednesday 19 November 2025 15:20 (15 minutes)

Presenter: MATSUI, Riki

Session Classification: C01: Neutrino 2

Contribution ID: 86

Type: **not specified**

Applying a Stochastic Acceleration Model to Young Pulsar Wind Nebulae

Wednesday 19 November 2025 15:35 (15 minutes)

Presenter: TANAKA, Shuta (Aoyama Gakuin University)

Session Classification: C01: Neutrino 2

Contribution ID: 87

Type: **not specified**

Challenging Charged Particle Astronomy with the Global Cosmic Ray Observatory

Wednesday 19 November 2025 16:10 (15 minutes)

Presenter: FUJII, Toshihiro

Session Classification: A04: X-ray

Contribution ID: **88**

Type: **not specified**

X-ray spectroscopy of accretion disk and jets in Galactic microquasars

Wednesday 19 November 2025 16:25 (15 minutes)

Presenter: SHIDATSU, Megumi (Ehime University)

Session Classification: A04: X-ray

Contribution ID: **89**

Type: **not specified**

MAXI observations of Multimessenger events

Wednesday 19 November 2025 16:40 (15 minutes)

Presenter: SERINO, Motoko (Aoyama Gakuin University)

Session Classification: A04: X-ray

Contribution ID: 90

Type: **not specified**

CAMELOT and IXPE: All-Sky Monitoring and Polarimetry for Multimessenger Astrophysics (3)

Wednesday 19 November 2025 16:55 (15 minutes)

Presenter: MIZUNO, Tsunefumi (Hiroshima University)

Session Classification: A04: X-ray

Contribution ID: 91

Type: **not specified**

Evolution from SNe to SNRs with XRISM

Wednesday 19 November 2025 17:10 (15 minutes)

Presenter: BAMBA, Aya (The University of Tokyo)

Session Classification: A04: X-ray

Contribution ID: 92

Type: **not specified**

Current Status of KOYOH Satellite in 2025

Wednesday 19 November 2025 17:25 (15 minutes)

Presenter: SAWANO, Tatsuya (Kanazawa University)

Session Classification: A04: X-ray

Contribution ID: **93**

Type: **not specified**

CTA LST status

Thursday 20 November 2025 09:00 (15 minutes)

Presenter: NODA, Koji (ICEHAP, Chiba U.)

Session Classification: A05: Gamma-ray

Contribution ID: 94

Type: **not specified**

Distinguishing Between X-ray burst and long X-ray burst

Presenter: KONDO, Yuta (Aoyamagakuin University)

Session Classification: Poster & Free discussion

Contribution ID: 95

Type: **not specified**

AGN Observations with the CTAO Large-Sized Telescope Prototype

Thursday 20 November 2025 09:15 (15 minutes)

Presenter: JOSHUA, Baxter

Session Classification: A05: Gamma-ray

Contribution ID: 96

Type: **not specified**

Elucidating physical processes in microquasars with multimessenger observations

Thursday 20 November 2025 09:30 (15 minutes)

Presenter: INOUE, Susumu (Chiba University / ICRR, University of Tokyo)

Session Classification: A05: Gamma-ray

Contribution ID: 97

Type: **not specified**

Evaluation of PMT Saturated Pulse Correction for TeV Cosmic-Ray Observations with the CTAO Large-Sized Telescope

Thursday 20 November 2025 09:45 (15 minutes)

Presenter: HASHIZUME, Masaki (Hiroshima University)

Session Classification: A05: Gamma-ray

Contribution ID: **98**

Type: **not specified**

Current and Future Cherenkov Cameras

Thursday 20 November 2025 10:20 (15 minutes)

Presenter: OKUMURA, Akira

Session Classification: B01: Detector development

Contribution ID: 99

Type: **not specified**

Development of novel pixel sensor AstroPix for future space-based MeV gamma-ray telescopes

Thursday 20 November 2025 10:35 (15 minutes)

Presenter: ROY, Abhradeep (Hiroshima University)

Session Classification: B01: Detector development

Contribution ID: **100**

Type: **not specified**

Developing a Fiber Optic Module (FOM) as a New Light Collector for IceCube-Gen2

Thursday 20 November 2025 10:50 (15 minutes)

Presenter: ISHII, Tatsuki

Session Classification: B01: Detector development

Contribution ID: **101**

Type: **not specified**

Development of instruments for MeV gamma rays

Thursday 20 November 2025 11:05 (15 minutes)

Presenter: TAJIMA, Hiroyasu

Session Classification: B01: Detector development