

The RIKEN-CPR Physics Workshop for Students

Report of Contributions

Contribution ID: 1

Type: **not specified**

Opening address (5), Erika Kawakami

Monday, December 12, 2022 10:00 AM (5 minutes)

Presenter: KAWAKAMI, Erika

Session Classification: Session 1 (chair: Erika Kawakami)

Contribution ID: 2

Type: **not specified**

Opening address

Presenter: KAWAKAMI, Erika

Session Classification: Session 1 (chair: Erika Kawakami)

Contribution ID: 3

Type: **not specified**

Welcome address (10), Toshiyuki Azuma

Monday, December 12, 2022 10:05 AM (10 minutes)

Presenters: TBA; AZUMA, Toshiyuki

Session Classification: Session 1 (chair: Erika Kawakami)

Contribution ID: 4

Type: **not specified**

keynote talk: The Thermodynamics of Quantum Systems (30+10), Paul Menczel

Monday, December 12, 2022 10:15 AM (40 minutes)

Presenter: MENCZEL, Paul

Session Classification: Session 1 (chair: Erika Kawakami)

Contribution ID: 5

Type: **not specified**

Dynamical chiral magnetic current and instability in Weyl semimetals (15+5), Tatsuya Amitani

Monday, December 12, 2022 10:55 AM (20 minutes)

Presenter: AMITANI, Tatsuya

Session Classification: Session 1 (chair: Erika Kawakami)

Contribution ID: 6

Type: **not specified**

The WASA-FRS experiment for light hypernuclei study (15+5), Vasył Drozd

Monday, December 12, 2022 11:15 AM (20 minutes)

Presenter: DROZD, Vasył

Session Classification: Session 2 (chair: Kiattichart Chartkunchand)

Contribution ID: 7

Type: **not specified**

The search for nnLambda (15+5), Samuel Escrig López

Monday, December 12, 2022 11:35 AM (20 minutes)

Presenter: ESCRIG LÓPEZ , Samuel

Session Classification: Session 2 (chair: Kiattichart Chartkunchand)

Contribution ID: 8

Type: **not specified**

keynote talk: Experience in Ph.D. and challenge to another physics field (30+10), Naoki Tsuji

Monday, December 12, 2022 1:30 PM (40 minutes)

Presenter: TSUJI, Naoki

Session Classification: Session 3 (chair: Hiroyuki Ekawa)

Contribution ID: 9

Type: **not specified**

(CANCELLED) Observation of radiative vibrational cooling of N₂O⁺ through Fermi resonance state (10+5), Sakumi Harayama

Monday, December 12, 2022 2:10 PM (15 minutes)

Presenter: HARAYAMA , Sakumi

Session Classification: Session 3 (chair: Hiroyuki Ekawa)

Contribution ID: 10

Type: **not specified**

Enhancing mass measurement accuracy using a novel position sensitive Schottky cavity doublet (15+5), George Hudson-Chang

Monday, December 12, 2022 2:25 PM (20 minutes)

Presenter: HUDSON-CHANG , George

Session Classification: Session 4 (chair: Shintaro Go)

Contribution ID: 11

Type: **not specified**

Infrared spectroscopy of cold molecular ions in superfluid helium droplets (10+5), Arisa Iguchi

Monday, December 12, 2022 2:45 PM (15 minutes)

Presenter: IGUCHI, Arisa

Session Classification: Session 4 (chair: Shintaro Go)

Contribution ID: 12

Type: **not specified**

keynote talk: Scalable circuit design for large-scale superconducting quantum computers (30+10), Shuhei Tamate

Monday, December 12, 2022 3:30 PM (40 minutes)

Presenter: TAMATE, Shuhei

Session Classification: Session 5 (chair: Asher Jennings)

Contribution ID: 13

Type: **not specified**

Recent developments of neutron imaging techniques using solid-state track detectors (25+5), Abdul Muneem

Monday, December 12, 2022 4:10 PM (30 minutes)

Presenter: MUNEEM , Abdul

Session Classification: Session 5 (chair: Asher Jennings)

Contribution ID: 14

Type: **not specified**

Efficient hydrogen evolution reaction due to topological polarization (15+5), Ming-Chun Jiang

Monday, December 12, 2022 4:40 PM (20 minutes)

Presenter: JIANG, Ming-Chun

Session Classification: Session 5 (chair: Asher Jennings)

Contribution ID: 15

Type: **not specified**

keynote talk: Discovery of a topological quantum link (30+10), Ilya Belopolski

Tuesday, December 13, 2022 10:00 AM (40 minutes)

Presenter: BELOPOLSKI, Ilya

Session Classification: Session 6 (chair: Somnath Maity)

Contribution ID: 16

Type: **not specified**

**Measurement of the Lambda binding energy on
3H(Lambda) and 4H(Lambda) using nuclear
emulsion and machine learning techniques (25+5),
Ayumi Kasagi**

Tuesday, December 13, 2022 10:40 AM (30 minutes)

Presenter: KASAGI, Ayumi

Session Classification: Session 6 (chair: Somnath Maity)

Contribution ID: 17

Type: **not specified**

Summary of INTT ROC Test (10+5)

Presenter: FUJIKI, Kazuma

Session Classification: Session 7 (chair: Somnath Maity)

Contribution ID: 18

Type: **not specified**

Development of LVDS Termination for sPHENIX-INTT Silicon Detector Readout Circuit (10+5)

Presenter: SHISHIKURA , Ryota

Session Classification: Session 7 (chair: Somnath Maity)

Contribution ID: **19**

Type: **not specified**

Performance of the Micro-coax-cable (10+5)

Presenter: KATO , Tomoya

Session Classification: Session 7 (chair: Somnath Maity)

Contribution ID: 20

Type: **not specified**

keynote talk: Let's reconstruct by myself (30+10), Takaoki Takanashi

Tuesday, December 13, 2022 1:30 PM (40 minutes)

Presenter: TAKANASHI, Takaoki

Session Classification: Session 7 (chair: Manami Nakagawa)

Contribution ID: 21

Type: **not specified**

Precise measurement of the Hypertriton lifetime with the WASA-FRS experiment (10+5), Enqiang Liu

Tuesday, December 13, 2022 2:10 PM (15 minutes)

Presenter: LIU, Enqiang

Session Classification: Session 7 (chair: Manami Nakagawa)

Contribution ID: 22

Type: **not specified**

Interference phenomena with Landau-Zener-Stückelberg-Majorana transitions (20+5), Oleh Ivakhnenko

Tuesday, December 13, 2022 2:25 PM (25 minutes)

Presenter: IVAKHNENKO , Oleh

Session Classification: Session 8 (chair: Yuan Yao)

Contribution ID: 23

Type: **not specified**

Single- and two-qubit non-resonant quantum logic gates (15+5), Artem Ryzhov

Tuesday, December 13, 2022 3:10 PM (20 minutes)

Presenter: RYZHOV , Artem

Session Classification: Session 8 (chair: Yuan Yao)

Contribution ID: 24

Type: **not specified**

**X-ray imaging experiment of multiplexing
Lobster-eye optics for all-sky X-ray monitor (15+5,
tentative), Yuanhui Zhou**

Tuesday, December 13, 2022 3:30 PM (20 minutes)

Presenter: ZHOU, Yuanhui

Session Classification: Session 8 (chair: Yuan Yao)

Contribution ID: 25

Type: **not specified**

Closing remark (10), Take R. Saito

Tuesday, December 13, 2022 3:50 PM (10 minutes)

Presenters: SAITO, Take R.; SAITO, Take

Session Classification: Closing

Contribution ID: 26

Type: **not specified**

Summary of INTT ROC Test (10+5), Kazuma Fujiki

Tuesday, December 13, 2022 11:10 AM (15 minutes)

Presenter: FUJIKI, Kazuma

Session Classification: Session 6 (chair: Somnath Maity)

Contribution ID: 27

Type: **not specified**

Development of LVDS Termination for sPHENIX-INTT Silicon Detector Readout Circuit (10+5), Ryota Shishikura

Tuesday, December 13, 2022 11:25 AM (15 minutes)

Presenter: SHISHIKURA , Ryota

Session Classification: Session 6 (chair: Somnath Maity)

Contribution ID: 28

Type: **not specified**

Performance of the Micro-coax-cable (10+5), Tomoya Kato

Tuesday, December 13, 2022 11:40 AM (15 minutes)

Presenter: KATO , Tomoya

Session Classification: Session 6 (chair: Somnath Maity)

Contribution ID: 29

Type: **not specified**

Majorana approach and phase control of qubits (15+5), Polina Kofman

Tuesday, December 13, 2022 2:50 PM (20 minutes)

Presenter: KOFMAN, Polina

Session Classification: Session 8 (chair: Yuan Yao)