

XX-

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX-(Why does the  
Universe  
accelerate?-Exhaustive study  
and challenge for the  
future)-FEB2018

# Report of Contributions

Contribution ID: 0

Type: **not specified**

## Opening talk (Chair: Miyazaki)

*Saturday, 10 February 2018 10:30 (30 minutes)*

**Presenter:** Prof. MURAYAMA, Hitoshi

Contribution ID: 1

Type: **not specified**

## Concluding remarks

Contribution ID: 2

Type: **not specified**

# Cosmological imprints of string axions in plateau

*Sunday, 11 February 2018 09:00 (18 minutes)*

**Presenter:** Dr URAKAWA, Yuko (Nagoya University)

**Session Classification:** C01 Ultimate theory (Chair:Takahashi)

Contribution ID: 3

Type: **not specified**

# String axions in Chern-Simons gravity

*Sunday, 11 February 2018 09:18 (18 minutes)*

**Presenter:** Prof. SODA, Jiro (Kobe University)

**Session Classification:** C01 Ultimate theory (Chair:Takahashi)

Contribution ID: 4

Type: **not specified**

## **Quantumness and information of primordial fluctuations**

*Sunday, 11 February 2018 09:54 (18 minutes)*

**Presenter:** Dr NAMBU, Yasusada (Nagoya University)

**Session Classification:** C01 Ultimate theory (Chair:Takahashi)

Contribution ID: 5

Type: **not specified**

## **Entanglement-induced quantum radiation, gravitational redshift**

*Sunday, 11 February 2018 09:36 (18 minutes)*

**Presenter:** Dr YAMAMOTO, Kazuhiro (Hiroshima University)

**Session Classification:** C01 Ultimate theory (Chair:Takahashi)

Contribution ID: 6

Type: **not specified**

## Symmetry of quantum gravity

*Sunday, 11 February 2018 10:12 (18 minutes)*

**Presenter:** Prof. OGURI, Hiroshi (Caltech/Kavli IPMU)

**Session Classification:** C01 Ultimate theory (Chair:Takahashi)



Contribution ID: 7

Type: **not specified**

## **B04 Overview**

*Monday, 12 February 2018 14:30 (20 minutes)*

**Presenter:** Prof. USUDA, Tomonori (NAOJ)

**Session Classification:** B04 TMT (Chair: Takada)

Contribution ID: 8

Type: **not specified**

## **Astro-comb developed by AIST and the test observation at OAO**

*Monday, 12 February 2018 14:50 (25 minutes)*

**Presenter:** Dr OKUBO, Sho (National Institute of Advanced Industrial Science and Technology)

**Session Classification:** B04 TMT (Chair: Takada)

Contribution ID: 9

Type: **not specified**

# **Progress report on the study of data acquisition and analysis method for precise radial velocity measurement using astro-comb II.**

*Monday, 12 February 2018 15:15 (20 minutes)*

**Presenter:** Dr KAMBE, Eiji (NAOJ/OAO)

**Session Classification:** B04 TMT (Chair: Takada)

Contribution ID: 10

Type: **not specified**

## **Probing extreme BHs throughout cosmic time & the co-evolution picture**

*Monday, 12 February 2018 15:35 (25 minutes)*

**Presenter:** Dr SCHRAMM, Malte (NAOJ)

**Session Classification:** B04 TMT (Chair:Takada)

Contribution ID: **11**

Type: **not specified**

## Research status and prospect

*Sunday, 11 February 2018 11:00 (15 minutes)*

**Presenter:** Prof. TAKAHASHI, Fuminobu (Tohoku University)

**Session Classification:** A02 Dark Matter and Structure Formation (Chair:Oguri)

Contribution ID: 12

Type: **not specified**

# Primordial black holes and dark matter

*Sunday, 11 February 2018 11:15 (30 minutes)*

**Presenter:** Prof. KAWASAKI, Masahiro (ICRR/Kavli IPMU)

**Session Classification:** A02 Dark Matter and Structure Formation (Chair:Oguri)

Contribution ID: 13

Type: **not specified**

# **Nonlinear structure formation in cold dark matter cosmology**

*Sunday, 11 February 2018 11:45 (30 minutes)*

**Presenter:** Dr TARUYA, Atsushi (Yukawa Institute for Theoretical Physics)

**Session Classification:** A02 Dark Matter and Structure Formation (Chair:Oguri)

Contribution ID: 14

Type: **not specified**

# **Towards galaxy formation simulations of Milky Way satellites with alternative dark matter models**

*Sunday, 11 February 2018 12:15 (15 minutes)*

**Presenter:** Dr OKAMOTO, Takashi (Hokkaido University)

**Session Classification:** A02 Dark Matter and Structure Formation (Chair:Oguri)



Contribution ID: 15

Type: **not specified**

## **Latest Results of POLARBEAR and Future Measurements of CMB Polarization with Simons Array and LiteBIRD**

*Sunday, 11 February 2018 16:00 (25 minutes)*

**Presenter:** Dr CHINONE, Yuji (UC Berkeley)

**Session Classification:** B01 CMB (Chair:Miyazaki)



Contribution ID: 17

Type: **not specified**

## **LiteBIRD**

*Sunday, 11 February 2018 16:50 (40 minutes)*

**Presenters:** Dr IMADA, Hiroaki (ISAS/JAXA); Dr MINAMI, Yuto (KEK)

**Session Classification:** B01 CMB (Chair:Miyazaki)

Contribution ID: **18**

Type: **not specified**

## **Research achievements of the D01 and impacts on the other groups**

*Saturday, 10 February 2018 11:00 (20 minutes)*

**Presenter:** Prof. KOMATSU, Eiichiro (MPA)

**Session Classification:** D01 Ultimate Physical Analysis (Chair: Miyazaki)

Contribution ID: 19

Type: **not specified**

## **Log-normal simulation for weak gravitational lensing: application to the cross-correlation with galaxies**

*Saturday, 10 February 2018 11:20 (20 minutes)*

**Presenter:** Dr KAYO, Issha (Tokyo University of Technology)

**Session Classification:** D01 Ultimate Physical Analysis (Chair: Miyazaki)



Contribution ID: 21

Type: **not specified**

# Reconstruction of primordial tensor power spectrum from B-mode observations

*Saturday, 10 February 2018 12:00 (20 minutes)*

**Presenter:** Dr HIRAMATSU, Takashi (Rikkyo University)

**Session Classification:** D01 Ultimate Physical Analysis (Chair: Miyazaki)





Contribution ID: 23

Type: **not specified**

## **Summary: achievements and issues**

*Saturday, 10 February 2018 13:30 (30 minutes)*

**Presenter:** Prof. SASAKI, Misao (Yukawa Institute for Theoretical Physics, Kyoto University)

**Session Classification:** A01 Theory of Inflation (Chair: Komatsu)

Contribution ID: 24

Type: **not specified**

## **Stable cosmological solutions in extended vector-tensor theory**

*Saturday, 10 February 2018 14:00 (20 minutes)*

**Presenter:** Dr NARUKO, Atsushi (Frontier Research Institute for Interdisciplinary Sciences (FRIS), Tohoku University)

**Session Classification:** A01 Theory of Inflation (Chair: Komatsu)

Contribution ID: 25

Type: **not specified**

## **Hidden universality in the merger rate of the primordial black hole binaries**

*Saturday, 10 February 2018 14:20 (20 minutes)*

**Presenter:** Dr SUYAMA, Teruaki (University of Tokyo)

**Session Classification:** A01 Theory of Inflation (Chair: Komatsu)

Contribution ID: 26

Type: **not specified**

# Probing the BSM physics with CMB precision cosmology: an application to supersymmetry

*Saturday, 10 February 2018 14:40 (20 minutes)*

**Presenter:** Dr WATANABE, Yuki (NIT, Gunma College)

**Session Classification:** A01 Theory of Inflation (Chair: Komatsu)

Contribution ID: 27

Type: **not specified**

## Updates and issues

*Monday, 12 February 2018 11:00 (30 minutes)*

**Presenter:** Prof. TAKADA, Masahiro (Kavli IPMU)

**Session Classification:** B03 Galaxy redshift survey (Chair:Sugiyama)

Contribution ID: 28

Type: **not specified**

## **redMaPPer clusters: comparison between simulations and observations**

*Monday, 12 February 2018 11:30 (20 minutes)*

**Presenter:** Dr SUNAYAMA, Tomomi (Kavli IPMU)

**Session Classification:** B03 Galaxy redshift survey (Chair:Sugiyama)

Contribution ID: 29

Type: **not specified**

## **Robust J-factor estimation of ultra faint dwarf galaxies**

*Monday, 12 February 2018 11:50 (20 minutes)*

**Presenter:** Dr HAYASHI, Kohei (NAOJ)

**Session Classification:** B03 Galaxy redshift survey (Chair:Sugiyama)

Contribution ID: **30**

Type: **not specified**

# **Gravitational waves and electromagnetic signals from a binary neutron star merger GW170817**

*Monday, 12 February 2018 12:30 (40 minutes)*

**Presenter:** Prof. KIUCHI, Kenta (Yukawa Institute for Theoretical Physics)

**Session Classification:** Special session for focused topic (Chair: Takahashi & Naruko)





Contribution ID: 32

Type: **not specified**

# The CALorimetric Electron Telescope (CALET) on the International Space Station: Results from the First Two Years of Operation

*Sunday, 11 February 2018 14:45 (45 minutes)*

**Presenter:** Prof. TORII, Shoji (Waseda University)

**Session Classification:** Special session for focused topic (Chair:Takahashi & Naruko)





Contribution ID: 35

Type: **not specified**

## **Searches for new Milky Way satellites and implications for the nature of dark matter**

*Saturday, 10 February 2018 16:26 (18 minutes)*

**Presenter:** Prof. CHIBA, Masashi (Tohoku University)

**Session Classification:** B02 Subaru imaging survey (Chair:Sasaki)

Contribution ID: 36

Type: **not specified**

# Predicting Photo-z using Deep Learning

*Saturday, 10 February 2018 16:44 (18 minutes)*

**Presenter:** Dr NAKANO, Jun (Kanazawa Institute of Technology)

**Session Classification:** B02 Subaru imaging survey (Chair:Sasaki)



Contribution ID: 38

Type: **not specified**

## **Cosmology with HSC cosmic shear analysis**

*Monday, 12 February 2018 12:10 (20 minutes)*

**Presenter:** Dr HIKAGE, Chiaki (Kavli IPMU)

**Session Classification:** B03 Galaxy redshift survey (Chair:Sugiyama)





Contribution ID: 40

Type: **not specified**

## Updated observational constraints on quintessence Dark Energy models

*Monday, 12 February 2018 09:15 (15 minutes)*

**Presenter:** Dr DURRIVE, Jean-Baptiste (Nagoya University)

**Session Classification:** A03 Dark Energy (Chair:Usuda)

Contribution ID: 41

Type: **not specified**

## Planck constraints on the non-flat Lambda-CDM inflation model

*Monday, 12 February 2018 09:30 (15 minutes)*

**Presenter:** Mr OOBA, Junpei (Nagoya University)

**Session Classification:** A03 Dark Energy (Chair:Usuda)

Contribution ID: 42

Type: **not specified**

# Equivalence principle violation after reheating

*Monday, 12 February 2018 09:45 (15 minutes)*

**Presenter:** Dr NITTA, Daisuke (Nagoya University)

**Session Classification:** A03 Dark Energy (Chair:Usuda)

Contribution ID: 43

Type: **not specified**

# Effect of Dark Energy Perturbation on Cosmic Voids Formation

*Monday, 12 February 2018 10:00 (15 minutes)*

**Presenter:** Mr ENDO, Takao

**Session Classification:** A03 Dark Energy (Chair:Usuda)

