

# **2nd TDLI Mini-Workshop on "New Physics at the Tera Scale" (2019)**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

# Results and Status of Chinese High altitude Cosmic Ray Experiments

*Sunday, 4 August 2019 09:00 (30 minutes)*

**Presenter:** HU, Hongbo

**Session Classification:** Plenary Session 1

Contribution ID: 2

Type: **not specified**

## **Some studies on SUSY in light of dark matter and muon $g-2$**

*Sunday, 4 August 2019 09:30 (30 minutes)*

**Presenter:** YANG, Jin Min (ITP, CAS, Beijing)

**Session Classification:** Plenary Session 1

Contribution ID: 3

Type: **not specified**

## Group Photo

Contribution ID: 4

Type: **not specified**

## Who orders dark matter?

*Sunday, 4 August 2019 08:30 (30 minutes)*

**Presenter:** YANAGIDA, Tsutomu (TDLI-SJTU)

**Session Classification:** Plenary Session 1

Contribution ID: 5

Type: **not specified**

# **Theoretical and observational confrontation of cosmology and gravity, and the new era of multi-messenger astronomy**

*Sunday, 4 August 2019 13:30 (25 minutes)*

**Presenter:** SARIDAKIS, Emmanuel (National Technical University of Athens & Baylor U.)

**Session Classification:** Parallel Session 3a (GW & Cosmo)

Contribution ID: 6

Type: **not specified**

## Gravitational wave and Collider searches for the EWSB patterns

*Sunday, 4 August 2019 13:55 (25 minutes)*

**Presenter:** BIAN, Ligong (Chongqing University)

**Session Classification:** Parallel Session 3a (GW & Cosmo)

Contribution ID: 7

Type: **not specified**

# Gravitational waves induced by non-Gaussian scalar perturbations

*Sunday, 4 August 2019 14:20 (25 minutes)*

**Presenter:** PI, Shi (Kavli IPMU)

**Session Classification:** Parallel Session 3a (GW & Cosmo)



Contribution ID: 8

Type: **not specified**

## **Probing decoupling in dark sector with cosmic microwave background**

*Sunday, 4 August 2019 14:45 (25 minutes)*

**Presenter:** CHOI, Gongjun (Tsung-Dao Lee Institute)

**Session Classification:** Parallel Session 3a (GW & Cosmo)

Contribution ID: 9

Type: **not specified**

## **Constraints on the Higgs decay width & searches for invisibly decaying Higgs bosons at the LHC**

*Sunday, 4 August 2019 13:30 (25 minutes)*

**Presenter:** OKAWA, Hideki (Fudan University)

**Session Classification:** Parallel Session 3b (LHC)

Contribution ID: **10**

Type: **not specified**

## **New physics searches at ATLAS**

*Sunday, 4 August 2019 13:55 (25 minutes)*

**Presenter:** LIANG, Zhijun (IHEP)

**Session Classification:** Parallel Session 3b (LHC)

Contribution ID: 11

Type: **not specified**

## **Leave No Stone Unturned - Brief Discussion of Less Explored Areas at the LHC**

*Sunday, 4 August 2019 14:20 (25 minutes)*

**Presenter:** WU, Yusheng (University of Science and Technology of China (CN))

**Session Classification:** Parallel Session 3b (LHC)

Contribution ID: **12**

Type: **not specified**

# **Recent updates on Higgs coupling measurements at ATLAS**

*Sunday, 4 August 2019 14:45 (25 minutes)*

**Presenter:** LIU, Kun

**Session Classification:** Parallel Session 3b (LHC)

Contribution ID: 13

Type: **not specified**

## **Self-interacting dark matter and the general singlet extension of the MSSM**

*Sunday, 4 August 2019 15:40 (25 minutes)*

**Presenter:** WANG, Wenyu (Beijing University of Technology)

**Session Classification:** Parallel Session 4a (Dark Matter)

Contribution ID: 14

Type: **not specified**

# Measuring the Spectrum of Freeze-In Dark Matter Model at the LHC

*Sunday, 4 August 2019 16:05 (25 minutes)*

**Presenter:** ZHANG, Mengchao (Jinan University)

**Session Classification:** Parallel Session 4a (Dark Matter)

Contribution ID: 15

Type: **not specified**

## **Cosmic-ray boosted dark matter and its effect on the electron direct detection**

*Sunday, 4 August 2019 16:30 (25 minutes)*

**Presenter:** DING, Ran

**Session Classification:** Parallel Session 4a (Dark Matter)



Contribution ID: **16**

Type: **not specified**

## Aspects of Boson Stars

*Sunday, 4 August 2019 16:55 (25 minutes)*

**Presenter:** SCHIAPPACASSE, Enrico D. (Shanghai Jiao Tong University & Tsung-Dao Lee Institute)

**Session Classification:** Parallel Session 4a (Dark Matter)

Contribution ID: 17

Type: **not specified**

# Positivity bounds on vector boson scattering

*Sunday, 4 August 2019 15:40 (25 minutes)*

**Presenter:** ZHANG, Cen (IHEP)

**Session Classification:** Parallel Session 4b (Pheno)

Contribution ID: **18**

Type: **not specified**

## Searches for new low-mass particles at LHCb

*Sunday, 4 August 2019 16:05 (25 minutes)*

**Presenter:** YIN, Hang (Central China Normal University CCNU (CN))

**Session Classification:** Parallel Session 4b (Pheno)

Contribution ID: **19**

Type: **not specified**

## The B-L solution to muon $g-2$ puzzle

*Sunday, 4 August 2019 16:30 (25 minutes)*

**Presenter:** KANG, Zhaofeng (华中科技大学 (HUST))

**Session Classification:** Parallel Session 4b (Pheno)

Contribution ID: **20**

Type: **not specified**

## **SUSY Search at LHC**

*Sunday, 4 August 2019 16:55 (25 minutes)*

**Presenter:** CHENG, Huajie

**Session Classification:** Parallel Session 4b (Pheno)

Contribution ID: 21

Type: **not specified**

# New Physics from Ultrahigh Energy Cosmic Rays

*Monday, 5 August 2019 08:30 (30 minutes)*

**Presenter:** MA, Bo-Qiang (Peking University)

**Session Classification:** Plenary Session 5

Contribution ID: 22

Type: **not specified**

## The SUSY Models

*Monday, 5 August 2019 09:00 (30 minutes)*

**Presenter:** LI, Tian-Jun (ITP)

**Session Classification:** Plenary Session 5

Contribution ID: 23

Type: **not specified**

## Hidden-charm molecular pentaquarks

*Monday, 5 August 2019 09:30 (30 minutes)*

**Presenter:** LIU, Xiang

**Session Classification:** Plenary Session 5



Contribution ID: 24

Type: **not specified**

## Neutrino mass models based on symmetries

*Monday, 5 August 2019 10:30 (25 minutes)*

**Presenter:** DING, Gui-Jun (University of Science and Technology of China)

**Session Classification:** Parallel Sessions 6a (Neutrino)

Contribution ID: 25

Type: **not specified**

# Measuring Leptonic CP Violation using Muon Decay at Rest

*Monday, 5 August 2019 10:55 (25 minutes)*

**Presenter:** EVSLIN, Jarah (Institute of Modern Physics, CAS)

**Session Classification:** Parallel Sessions 6a (Neutrino)

Contribution ID: 26

Type: **not specified**

## Status and prospects of mu-tau symmetry

*Monday, 5 August 2019 11:20 (25 minutes)*

**Presenter:** NATH, Newton (IHEP, Beijing)

**Session Classification:** Parallel Sessions 6a (Neutrino)

Contribution ID: 27

Type: **not specified**

## **PandaX-III: Search for neutrinoless double beta decay of $^{136}\text{Xe}$ at CJPL**

*Monday, 5 August 2019 11:45 (25 minutes)*

**Presenter:** WANG, Shaobo

**Session Classification:** Parallel Sessions 6a (Neutrino)

Contribution ID: 28

Type: **not specified**

## Signature of 2HDM at Higgs Factories

*Monday, 5 August 2019 10:30 (25 minutes)*

**Presenter:** YAN, Qi-Shu (UCAS)

**Session Classification:** Parallel Sessions 6b (Pheno)

Contribution ID: 29

Type: **not specified**

## Top quark pair production

*Monday, 5 August 2019 10:55 (25 minutes)*

**Presenter:** YANG, Lilin

**Session Classification:** Parallel Sessions 6b (Pheno)

Contribution ID: **30**

Type: **not specified**

# **The Fate of Jet: Its Emergence and Disappearance**

*Monday, 5 August 2019 11:20 (25 minutes)*

**Presenter:** ZHU, HuaXing (Zhejiang University)

**Session Classification:** Parallel Sessions 6b (Pheno)

Contribution ID: 31

Type: **not specified**

## Probing New Physics Scale via nTGC at $e^+e^-$ Colliders

*Monday, 5 August 2019 11:45 (25 minutes)*

**Presenter:** XIAO, Ruiqing

**Session Classification:** Parallel Sessions 6b (Pheno)



Contribution ID: 32

Type: **not specified**

# The many faces of nonstandard neutrino interactions

*Monday, 5 August 2019 13:30 (30 minutes)*

**Presenter:** MARFATIA, Danny

**Session Classification:** Plenary Session 7

Contribution ID: 33

Type: **not specified**

## **Detecting ultralight dark matter with high-precision astrometry and timing**

*Monday, 5 August 2019 14:00 (30 minutes)*

**Presenter:** YUAN, Qiang (Purple Mountain Observatory)

**Session Classification:** Plenary Session 7

Contribution ID: 34

Type: **not specified**

## Status of the PandaX Experiment

*Monday, 5 August 2019 14:30 (30 minutes)*

**Presenter:** ZHOU, Ning (Shanghai Jiao Tong University)

**Session Classification:** Plenary Session 7

Contribution ID: 35

Type: **not specified**

# Higgs and Electroweak measurements and their EFT interpretation

*Sunday, 4 August 2019 10:30 (30 minutes)*

**Presenter:** HAYS, Chris (Oxford University)

**Session Classification:** Plenary Session 2

Contribution ID: 36

Type: **not specified**

## **Status for the CEPC and the physics study towards the TDR**

*Sunday, 4 August 2019 11:00 (30 minutes)*

**Presenter:** RUAN, Manqi (Institute of High Energy Physics, Beijing, China)

**Session Classification:** Plenary Session 2

Contribution ID: 37

Type: **not specified**

## Searching for particle physics signals via gravitational wave astronomy

*Sunday, 4 August 2019 11:30 (30 minutes)*

**Presenter:** CAI, Yi-Fu (University of Science and Technology of China)

**Session Classification:** Plenary Session 2

Contribution ID: 38

Type: **not specified**

## Recent Progress on Scattering Amplitudes

*Monday, 5 August 2019 15:00 (30 minutes)*

**Presenter:** HE, Song (ITP-CAS)

**Session Classification:** Plenary Session 7