

# IPA 2018 (Interplay between Particle and Astroparticle physics)



## Report of Contributions

Contribution ID: 1

Type: **not specified**

# Welcome

*Monday 8 October 2018 09:00 (25 minutes)*

**Session Classification:** Plenary

Contribution ID: 2

Type: **not specified**

## **Status of anomalies in indirect detection**

*Monday 8 October 2018 09:30 (25 minutes)*

**Presenter:** LINDEN, Tim

**Session Classification:** Plenary

Contribution ID: 3

Type: **not specified**

## **Multi-messenger astronomy results**

*Monday 8 October 2018 10:00 (25 minutes)*

**Presenter:** CHEN, Hsin-Yu

**Session Classification:** Plenary

Contribution ID: 4

Type: **not specified**

## **Low threshold DM experiments**

*Monday 8 October 2018 11:00 (25 minutes)*

**Presenter:** ROBERT, Calkins

**Session Classification:** Plenary

Contribution ID: 5

Type: **not specified**

## **Perspectives on axioms**

*Monday 8 October 2018 11:30 (25 minutes)*

**Presenter:** KAHN, Yoni

**Session Classification:** Plenary

Contribution ID: 6

Type: **not specified**

## **Student talks**

**Session Classification:** Plenary

Contribution ID: 7

Type: **not specified**

## **General status of flavor physics**

*Monday 8 October 2018 14:00 (25 minutes)*

**Presenter:** GROSSMAN, Yuval (Cornell)

**Session Classification:** Plenary



Contribution ID: 8

Type: **not specified**

## **Status and prospects of LFUV measurements in B physics**

*Monday 8 October 2018 14:30 (25 minutes)*

**Presenter:** ISHIKAWA, Akimasa (Tohoku University (JP))

**Session Classification:** Plenary

Contribution ID: 9

Type: **not specified**

## **Implication of anomalies in B physics for high $p_T$**

*Monday 8 October 2018 15:00 (25 minutes)*

**Presenter:** MATIAS, Joaquim (Universitat Autònoma de Barcelona)

**Session Classification:** Plenary

Contribution ID: **10**

Type: **not specified**

## **Neutrino properties from Cosmology: status and outlook including sterile neutrinos**

*Monday 8 October 2018 16:00 (25 minutes)*

**Presenter:** DE HAAN, Tijmen

**Session Classification:** Plenary

Contribution ID: 11

Type: **not specified**

## Neutrino mass hierarchy

*Monday 8 October 2018 16:30 (25 minutes)*

**Presenter:** ZHANG, Chao (BNL)

**Session Classification:** Plenary

Contribution ID: 12

Type: **not specified**

## **Neutrino experiment results and prospects for CP violation**

*Monday 8 October 2018 17:00 (25 minutes)*

**Presenter:** SUTER, Louise (University of Manchester)

**Session Classification:** Plenary

Contribution ID: 13

Type: **not specified**

## Double beta decay

*Monday 8 October 2018 17:30 (25 minutes)*

**Presenter:** KOLOMENSKY, Yury (UC Berkeley/LBNL)

**Session Classification:** Plenary

Contribution ID: 14

Type: **not specified**

## Coherent Neutrino Scattering

*Tuesday 9 October 2018 09:15 (25 minutes)*

**Presenter:** SCHOLBERG, Kate (Duke University)

**Session Classification:** Plenary

Contribution ID: 15

Type: **not specified**

## **Charged lepton flavor violation ( $\mu 2e$ , $\mu 3e$ ,...)**

*Tuesday 9 October 2018 09:45 (25 minutes)*

**Presenter:** BANERJEE, Swagato (University of Louisville (US))

**Session Classification:** Plenary



Contribution ID: 16

Type: **not specified**

## Update on (g-2)\_mu

*Tuesday 9 October 2018 10:15 (25 minutes)*

**Presenter:** WALTON, Tammy

**Session Classification:** Plenary

Contribution ID: 17

Type: **not specified**

## **Searches for milicharged particles, heavy ionizing particles**

**Presenter:** HAAS, Andrew (New York University)

**Session Classification:** Plenary

Contribution ID: **18**

Type: **not specified**

## **Searches for long lived particles at the LHC**

*Tuesday 9 October 2018 11:30 (25 minutes)*

**Presenter:** BEACHAM, James (Duke University)

**Session Classification:** Plenary

Contribution ID: **19**

Type: **not specified**

## **Student talks**

**Session Classification:** Plenary

Contribution ID: 20

Type: **not specified**

## **Discovering or falsifying predictive models of sub-GeV thermal dark matter**

*Tuesday 9 October 2018 14:00 (25 minutes)*

**Presenter:** KRNJAIC, Gordan (Fermilab)

**Session Classification:** Plenary

Contribution ID: 21

Type: **not specified**

## Portal searches (heavy photons)

*Tuesday 9 October 2018 14:30 (25 minutes)*

**Presenter:** WILLIAMS, J Michael (Massachusetts Inst. of Technology (US))

**Session Classification:** Plenary

Contribution ID: 22

Type: **not specified**

## Gravitational wave measurements

*Tuesday 9 October 2018 15:30 (25 minutes)*

**Presenter:** ESSICK, Reed

**Session Classification:** Plenary

Contribution ID: 23

Type: **not specified**

## **Primordial black holes in the wake of LIGO**

*Tuesday 9 October 2018 16:30 (25 minutes)*

**Presenter:** FERRER, Francesc

**Session Classification:** Plenary



Contribution ID: 24

Type: **not specified**

## **Gravitational waves and pulsar timing arrays**

*Tuesday 9 October 2018 17:00 (25 minutes)*

**Presenter:** MINGARELLI, Chiara

**Session Classification:** Plenary

Contribution ID: 25

Type: **not specified**

## **Cosmological sources of gravitational waves**

*Tuesday 9 October 2018 17:30 (25 minutes)*

**Presenter:** HOOK, Anson

**Session Classification:** Plenary

Contribution ID: 26

Type: **not specified**

## Modified gravity

**Presenter:** FRANDSEN, Mads (Oxford University)

**Session Classification:** Plenary

Contribution ID: 27

Type: **not specified**

## **Status and new ideas in electroweak baryogenesis**

*Wednesday 10 October 2018 09:00 (25 minutes)*

**Presenter:** FUYUTO, Kaori (Japan)

**Session Classification:** Plenary

Contribution ID: 28

Type: **not specified**

## **New low scale baryogenesis models**

*Wednesday 10 October 2018 09:30 (25 minutes)*

**Presenter:** MCKEEN, David (TRIUMF)

**Session Classification:** Plenary

Contribution ID: 29

Type: **not specified**

## **Testing baryogenesis/leptogenesis at present and future colliders**

*Wednesday 10 October 2018 10:00 (25 minutes)*

**Presenter:** Dr LONG, Andrew (University of Michigan - LCTP)

**Session Classification:** Plenary

Contribution ID: **30**

Type: **not specified**

## **Constraining dark matter with CMB**

*Wednesday 10 October 2018 11:00 (25 minutes)*

**Presenter:** BODDY, Kimberly

**Session Classification:** Plenary

Contribution ID: **31**

Type: **not specified**

## **21 cm cosmology and connections to dark sectors**

*Wednesday 10 October 2018 11:30 (25 minutes)*

**Presenter:** MIROCHA, Jordan

**Session Classification:** Plenary



Contribution ID: **32**

Type: **not specified**

## **Student talks**

**Session Classification:** Plenary

Contribution ID: 33

Type: **not specified**

## **Dark matter candidates and models**

*Thursday 11 October 2018 09:15 (25 minutes)*

**Presenter:** FARINA, Marco (Rutgers University)

**Session Classification:** Plenary

Contribution ID: 34

Type: **not specified**

## Direct Dark matter searches (exp overview)

*Thursday 11 October 2018 09:45 (25 minutes)*

**Presenter:** LANG, Rafael

**Session Classification:** Plenary

Contribution ID: 35

Type: **not specified**

## **Indirect detection of dark matter**

*Thursday 11 October 2018 10:15 (25 minutes)*

**Presenter:** STRIGARI, Louis (Texas A&M)

**Session Classification:** Plenary

Contribution ID: 36

Type: **not specified**

## **Dark matter at the LHC**

*Thursday 11 October 2018 11:15 (25 minutes)*

**Presenter:** Dr PANIZZO, Giancarlo (INFN Gruppo collegato di Udine)

**Session Classification:** Plenary

Contribution ID: 37

Type: **not specified**

## **Theory of global DM fits/interpretations (direct, indirect,LHC)**

*Thursday 11 October 2018 11:45 (25 minutes)*

**Presenter:** BROD, Joachim (TU Dortmund)

**Session Classification:** Plenary

Contribution ID: **38**

Type: **not specified**

## **Student talks**

**Session Classification:** Plenary

Contribution ID: 39

Type: **not specified**

## **Cosmology and the Higgs boson**

*Thursday 11 October 2018 14:00 (25 minutes)*

**Presenter:** FAN, JiJi (Brown University)

**Session Classification:** Plenary



Contribution ID: 40

Type: **not specified**

## Tensions in LambdaCDM

*Thursday 11 October 2018 14:30 (25 minutes)*

**Presenter:** ADDISON, Graeme

**Session Classification:** Plenary

Contribution ID: 41

Type: **not specified**

## Inflationary Models

**Presenter:** QUEVEDO, Fernando (The Abdus Salam International Centre for Theoretical Physics)

**Session Classification:** Plenary

Contribution ID: 42

Type: **not specified**

## **Future of constraints on inflation**

*Thursday 11 October 2018 15:30 (25 minutes)*

**Presenter:** HAZUMI, Masashi (KEK)

**Session Classification:** Plenary

Contribution ID: 43

Type: **not specified**

## **Status and prospects for DES and LSST**

*Thursday 11 October 2018 16:00 (25 minutes)*

**Presenter:** ROODMAN, Aaron

**Session Classification:** Plenary

Contribution ID: 44

Type: **not specified**

## **Overview of beyond the standard model phenomenology**

*Friday 12 October 2018 09:15 (25 minutes)*

**Presenter:** FOX, Patrick

**Session Classification:** Plenary

Contribution ID: 45

Type: **not specified**

## Overview of collider searches

*Friday 12 October 2018 09:45 (25 minutes)*

**Presenter:** HARRIS, Philip Coleman (Massachusetts Inst. of Technology (US))

**Session Classification:** Plenary

Contribution ID: 46

Type: **not specified**

## Physics at future colliders

*Friday 12 October 2018 10:15 (25 minutes)*

**Presenter:** WANG, LianTao (University of Chicago)

**Session Classification:** Plenary

Contribution ID: 47

Type: **not specified**

## Self-interacting dark matter

**Presenter:** PETER, Annika (Ohio State University)

**Session Classification:** Plenary



Contribution ID: 48

Type: **not specified**

## **Dark matter properties from GAIA**

*Friday 12 October 2018 11:45 (25 minutes)*

**Presenter:** NECIB, Lina (California Institute of Technology)

**Session Classification:** Plenary

Contribution ID: 49

Type: **not specified**

## Student talks

**Session Classification:** Plenary

Contribution ID: 50

Type: **not specified**

## Experimental Neutrino Astronomy

*Friday 12 October 2018 14:00 (25 minutes)*

**Presenter:** YUAN, Tianlu

**Session Classification:** Plenary

Contribution ID: 51

Type: **not specified**

## High Energy Cosmic Rays

*Friday 12 October 2018 14:30 (25 minutes)*

**Presenter:** SERPICO, Pasquale (LAPTH, Annecy-le-vieux)

**Session Classification:** Plenary

Contribution ID: 52

Type: **not specified**

## **Neutrino Masses, Dark Matter and the New Physics Scale**

*Friday 12 October 2018 11:15 (25 minutes)*

**Presenter:** Prof. FILEVIEZ PEREZ, Pavel (Case Western Reserve University)

**Session Classification:** Plenary

Contribution ID: 53

Type: **not specified**

## **IPA2020**

*Friday 12 October 2018 15:00 (10 minutes)*

**Presenter:** INGUGLIA, gianluca

**Session Classification:** Plenary

Contribution ID: 54

Type: **not specified**

## Self-interacting dark matter

*Tuesday 9 October 2018 15:00 (25 minutes)*

**Presenter:** PETER, Annika

**Session Classification:** Plenary

Contribution ID: 55

Type: **not specified**

## **The Axion Quark Nugget (AQN) Dark Matter Model**

*Monday 8 October 2018 12:00 (8 minutes)*

**Presenter:** GE, Shuailiang

**Session Classification:** Student talks



Contribution ID: 56

Type: **not specified**

## **Spin-Independent Long-Range Interactions from Weakly-Interacting Sub-eV Particles (WISPs)**

*Monday 8 October 2018 12:10 (8 minutes)*

**Presenter:** ALDAIHAN, Sheakha

**Session Classification:** Student talks

Contribution ID: 57

Type: **not specified**

## **Simulating axion string-wall networks**

*Monday 8 October 2018 12:20 (8 minutes)*

**Presenter:** FLEURY, Leesa

**Session Classification:** Student talks

Contribution ID: 58

Type: **not specified**

## **Supernova 1987A Constraints on Low-Mass Dark Sectors**

*Tuesday 9 October 2018 12:00 (8 minutes)*

**Presenter:** CHANG, Jae Hyeok

**Session Classification:** Student talks

Contribution ID: 59

Type: **not specified**

## Gravitational Waves

*Tuesday 9 October 2018 12:10 (8 minutes)*

**Presenter:** CHINCHOLE, Aditya

**Session Classification:** Student talks

Contribution ID: **60**

Type: **not specified**

## **Primordial black hole formation by vacuum bubbles**

*Tuesday 9 October 2018 12:20 (8 minutes)*

**Presenter:** DENG, Heling

**Session Classification:** Student talks

Contribution ID: **61**

Type: **not specified**

## **Boosting the Annihilation Rate with Ultracompact Minihalos**

*Thursday 11 October 2018 12:15 (8 minutes)*

**Presenter:** FOSTER, Joshua

**Session Classification:** Student talks

Contribution ID: 62

Type: **not specified**

## **Terrestrial effects on sub-GeV dark matter direct detection via electron scatterings for heavy and ultralight mediators**

*Thursday 11 October 2018 12:25 (8 minutes)*

**Presenter:** SHOLAPURKAR, Mukul

**Session Classification:** Student talks

Contribution ID: 63

Type: **not specified**

## **Determining the Majorana nature of neutrino through patterns of nucleon-antinucleon oscillation and conversion processes**

*Thursday 11 October 2018 12:45 (8 minutes)*

**Presenter:** YAN, Xinshuai

**Session Classification:** Student talks



Contribution ID: 64

Type: **not specified**

## The Flavor of Flavorful Higgs Bosons

*Friday 12 October 2018 12:15 (8 minutes)*

**Presenter:** TUCKLER, Douglas

**Session Classification:** Student talks

Contribution ID: 65

Type: **not specified**

## **Study atmospheric neutrinos for the DSNB detection in Super-Kamiokande and SK-Gd**

*Friday 12 October 2018 12:25 (8 minutes)*

**Presenter:** ZHOU, Bei

**Session Classification:** Student talks

Contribution ID: 66

Type: **not specified**

## **On Approximation Methods in the Study of Boson Stars**

*Friday 12 October 2018 12:35 (8 minutes)*

**Presenter:** STREET, Lauren

**Session Classification:** Student talks

Contribution ID: 67

Type: **not specified**

## **Macroscopic Dark Matter detection using fluorescence detectors**

*Monday 8 October 2018 12:30 (8 minutes)*

**Presenter:** SINGH SIDHU, Jagjit (CWRU)

**Session Classification:** Student talks

Contribution ID: 68

Type: **not specified**

## **Relativistic particle scattering and Big Bang Nucleosynthesis**

*Thursday 11 October 2018 12:35 (8 minutes)*

**Presenter:** KEDIA , Atul

**Session Classification:** Student talks

Contribution ID: 69

Type: **not specified**

## **DUNE as the next-generation solar neutrino experiment**

*Tuesday 9 October 2018 12:30 (8 minutes)*

**Presenter:** ZHU, Guanying (The Ohio State University)

**Session Classification:** Student talks

Contribution ID: 70

Type: **not specified**

## **EFT for Non Standard neutrino Interactions**

*Friday 12 October 2018 12:45 (8 minutes)*

**Presenter:** TAMMARO, Michele

**Session Classification:** Student talks

Contribution ID: 71

Type: **not specified**

## About excursions

*Wednesday 10 October 2018 11:55 (5 minutes)*

**Session Classification:** Plenary



Contribution ID: 72

Type: **not specified**

## **conference dinner info**

*Thursday 11 October 2018 16:25 (5 minutes)*

**Session Classification:** Plenary