

Session Program

8-12 Oct 2018



IPA 2018 (Interplay between Particle and Astroparticle physics)

Student talks

Sunday 7 October

12:00

Student talks

Session | Location: | Convener: Yuval Grossman

12:00–12:08 **The Axion Quark Nugget (AQN) Dark Matter Model**

Speaker

Shuailiang Ge

12:10–12:18

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

Speaker

Sheakha Aldaihan

12:20–12:28 **Simulating axion string-wall networks**

Speaker

Leesa Fleury

12:30–12:38 **Macroscopic Dark Matter detection using fluorescence detectors**

Speaker

Jagjit Singh Sidhu

12:40

Monday 8 October

12:00

Student talks

Session | Location: | Convener: J Michael Williams

12:00–12:08

Supernova 1987A Constraints on Low-Mass Dark Sectors

Speaker

Jae Hyeok Chang

12:10–12:18

Gravitational Waves

Speaker

Aditya Chinchole

12:20–12:28

Primordial black hole formation by vacuum bubbles

Speaker

Heling Deng

12:30–12:38

DUNE as the next-generation solar neutrino experiment

Speaker

Guanying Zhu

12:45

Wednesday 10 October

12:15

Student talks

Session | Location: | Convener: Philip Coleman Harris

12:15–12:23 **Boosting the Annihilation Rate with Ultracompact Minihalos**

Speaker

Joshua Foster

12:25–12:33

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

Speaker

Mukul Sholapurkar

12:35–12:43

Relativistic particle scattering and Big Bang Nucleosynthesis

Speaker

Atul Kedia

12:45–12:53

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

Speaker

Xinshuai Yan

12:55

Thursday 11 October

12:15

Student talks

Session | **Location:** | **Convener:** Louis Strigari

12:15–12:23 **The Flavor of Flavorful Higgs Bosons**

Speaker

Douglas Tuckler

12:25–12:33

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

Speaker

Bei Zhou

12:35–12:43

On Approximation Methods in the Study of Boson Stars

Speaker

Lauren Street

12:45–12:53

EFT for Non Standard neutrino Interactions

Speaker

Michele Tammaro

12:55