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

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 nucleonantinucleon 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 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