

Session Program

30 November 2020 to 4 December 2020

Gordon Godfrey Workshop on Astroparticle Physics

Plenary

UNSW Sydney

Monday 30 November

09:00

Plenary

Session | **Location:** UNSW Sydney | **Convener:** Csaba Balazs

09:00–09:10 **Introduction**

Speaker
Gavin Rowell

09:10–10:00 **Dark Matter Physics in this and other universes**

Speaker
Geraint Lewis

10:00–10:10 **questions and break**

10:10–11:00
Inflation and Neutrinos: Searching for New Physics with the Cosmic Microwave Background

Speaker
Dr Christian Reichardt

11:00–11:10 **questions and break**

11:10–12:00 **Facilities for Extreme Particles and Photons**

Speaker
Gavin Rowell

12:00–12:30 **Discussion**

Speaker
Gavin Rowell

12:30

Tuesday 1 December

09:00

Plenary

Session | **Location:** UNSW Sydney | **Convener:** Roland Crocker

09:00–09:50 **Extreme Particle Accelerators**

Speaker

Felix Aharonian

09:50–10:00 **questions and break**

10:00–10:50 **Cosmic rays and their role in galaxy evolution**

Speaker

Mark Krumholz

10:50–11:00 **questions and break**

11:00–11:30 **Discussion**

Speaker

Gavin Rowell

11:30–12:00 **break**

12:00–12:50 **Prior(s) and Prejudice(s): Directions for Particle Cosmology**

Speaker

Richard Easther

12:50

Wednesday 2 December

09:00

Plenary

Session | **Location:** UNSW Sydney | **Convener:** Prof. Miroslav Filipovic

09:00–09:50 **The Search for Efficient Particle Accelerators in the Universe**

Speaker
Andrew Taylor

09:50–10:00 **questions and break**

10:00–10:50 **Primordial Black Holes and Gravitational Waves**

Speaker
Misao Sasaki

10:50–11:00 **questions and break**

11:00–11:50 **GAMBIT**

Speaker
Martin John White

11:50–12:20 **Discussion**

Speaker
Gavin Rowell

12:30

Thursday 3 December

09:00

Plenary

Session | **Location:** UNSW Sydney | **Convener:** Michael Schmidt

09:00–09:50

CosmoBit and DarkBit: Building bridges between particle physics and cosmology

Speaker

Felix Kahlhoefer

09:50–10:00

questions and break

10:00–10:50

Cosmic relics

Speaker

Prof. Archil Kobakhidze

10:50–11:00

questions and break

11:00–11:50

Neutrino astrophysics

Speaker

Jenni Adams

11:50–12:20

Discussion

Speaker

Gavin Rowell

12:30

Friday 4 December

09:00

Plenary

Session | **Location:** UNSW Sydney | **Convener:** Jan Hamann

09:00–09:50

Extreme Particle Interactions with the Interstellar Medium: Photon and Particle Signatures

Speaker

Dr Silvia Celli

09:50–10:00

questions and break

10:00–10:50

Leptogenesis

Speaker

Dr Julia Harz

10:50–11:00

questions and break

11:00–11:10

Dark matter candidates and how to detect them

Speaker

Victor Flambaum

11:10–11:40

Discussion

Speaker

Gavin Rowell

11:40

14:00

Plenary: CoE discussion

Session | **Location:** UNSW Sydney | **Convener:** Gavin Rowell

14:00–14:15

CoE Overview

Speakers

Prof. Celine Boehm, Gavin Rowell

14:15–15:00

Community Input

14:15–14:25

Quantum approach to dark matter

Speaker

Allan Ernest

14:25–14:35

Testing/constraining fuzzy DM with the Keck telescope

Speaker

Duncan Forbes

15:00–16:00

CoE discussion

Speakers

Celine Boehm, Gavin Rowell

16:00