Session Program

9–13 Dec 2024

International Joint Workshop on the Standard Model and Beyond 2024 & 3rd Gordon Godfrey Workshop on Astroparticle Physics

Cosmology

Tuesday 10 December

14:00

Cosmology

Session | **Location:** Ainsworth Building, G02 | **Convener:** ZACHARY PICKER

14:00–14:30

Gravitational wave spectrum from expanding string loops on domain walls: Implication to nano-hertz pulsar timing array signal

Speaker
Wakutaka Nakano

14:30–14:50

Listening to Dark Sectors with Pulsar Timing Arrays

Speaker
Dr Amitayus Banik

14:50–15:10

Astrometry, gravitational waves and synergies with Pulsar Timing Arrays

Speaker
Ameek Malhotra

15:10–15:30

Hunting Primordial Black Hole Dark Matter in Lyman-alpha forest

Speaker
Abhijeet Singh

15:30–15:50

CMB and 21cm constraints on Primordial Black Holes

Speaker
Dominic Agius

15:50

16:20

Cosmology

Session | **Location:** Ainsworth Building, G02 | **Convener:** Jan Hamann

16:20–16:50

Domain wall networks and their cosmological signatures

Speaker
Urjit Yajnik

16:50–17:10

Revisiting Metastable Cosmic String Breaking

Speaker
Akifumi Chitose

17:10–17:30

Prediction of non-Gaussianity in CMB lensing with full-sky simulations

Speaker
Yuqi Kang

17:30–17:50

CMBubbles: Searching for the existence of a multiverse in Planck CMB

Speaker
Ms Jahanvi M

17:50

Thursday 12 December

14:00

Cosmology

Session | **Location:** Ainsworth Building, G02 | **Convener:** Jia Liu

14:00–14:30 **Early supermassive black hole direct collapse with dark matter**

Speaker
ZACHARY PICKER

14:30–14:50

Self-interacting scalar field distributions around Schwarzschild black holes

Speaker
Mr Alejandro Aguilar Nieto

14:50–15:10

A Beyond Standard Model Approach to Dark Energy and its multiple observational consequences

Speaker
Prof. Anupam Singh

15:10–15:30

Reconciling Cosmological Tensions with Inelastic Dark Matter and Dark Radiation in a $U(1)_D$ Framework

Speaker
Satyabrata Mahapatra

15:30–15:50 **Bayesian Optimisation for Bayesian Evidence (BOBE)**

Speaker
Nathan Cohen

15:50