

Session Program

9-13 Dec 2024

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

Standard Model and Beyond

Tuesday 10 December

14:00

Standard Model and Beyond

Session | **Location:** Ainsworth Building, 102 | **Convener:** Dr Oleg Popov

14:00–14:30 **QED 5-loop on the lattice**

Speaker

Ryuichiro Kitano

14:30–14:50 **Weak mixing angle at direct detection**

Speaker

Tarak Nath Maity

14:50–15:10 **A Full EFT Approach to Radiative Neutrino Mass**

Speaker

James Vandeleur

15:10–15:30

Scale Dependence of Neutrino Mixing Parameters in the Scotogenic Model

Speaker

Weihang Zhang

15:30–15:50

Extending Global Fits of 4D Composite Higgs Models with Partially Composite Leptons

Speaker

Kenn Shern Goh

15:50

16:20

Standard Model and Beyond

Session | **Location:** Ainsworth Building, 102 | **Convener:** John Gargalionis

16:20–16:50

Model-independent Extraction of Form Factors and $|V_{cb}|$ in $B \rightarrow D l \nu$ with hadronic tagging at BABAR

Speaker

Prof. Gerald Eigen

16:50–17:10 **Recent dark sector searches from the BABAR experiment**

Speaker

Steven Robertson

17:10–17:30

Prospects for Long Lived Particle searches with the MATHSULA experiment

Speaker

Steven Robertson

17:30–17:50

Natural supersymmetry without cancellations in the quiver supersymmetric standard model

Speaker

Dr Kenichi Okumura

17:50–18:10

Beyond the Standard Model with Geometric Quantization

Speaker

Tom McClain

18:10

Thursday 12 December

14:00

Standard Model and Beyond

Session | **Location:** Ainsworth Building, 102 | **Convener:** Dr Otari Sakhelashvili

14:00–14:30 **BelleII excess & Muon $g-2$ illuminating Light DM with Higgs Portal**

Speaker

Dr Jongkuk Kim

14:30–14:50

Dark gauge mediated supersymmetry breaking by a massless dark photon

Speaker

Yechan Kim

14:50–15:10

Cosmological implications of radiative electroweak symmetry breaking theories

Speaker

Kepan Xie

15:10–15:30

Non-Holomorphic Modular \mathcal{A}_4 Symmetric Scotogenic Model

Speaker

Dr Oleg Popov

15:30–15:50

Axion Quality, Clockwork & Extra Dimensions

Speaker

Marko Beocanin

15:50