



# The 59th Winter Nuclear & Particle Physics Conference (WNPPC2022)

## Tuesday, 15 February 2022

### Particle Physics (13:00 - 14:12)

-Conveners: Thomas Brunner

time	[id] title	presenter
13:00	[27] Upgrade of the ATLAS NSW	SHEPPARD, Damian
13:12	[55] Search for Long Lived Particles with Innovative Tracking Algorithm in the ATLAS Experiment	HANIF, Hamza
13:24	[17] Search for Vector-like Leptons in Multi-lepton Final States with the ATLAS Detector	MCCRACKEN, Callum
13:36	[14] MUTE: A Modern Calculation of Deep Underground and Underwater Cosmic Ray Muons	WOODLEY, William
13:48	[16] Toward Understanding the Nuclear Efficiency Threshold of Bubble Chamber Detectors	LI, Xiang

## Wednesday, 16 February 2022

### Particle Physics: exotic atoms and fundamental symmetries (13:00 - 14:12)

-Conveners: Derek Fujimoto

time	[id] title	presenter
13:00	[58] An Implementation of Atomic Form Factor	ANJUM, Nuzhat
13:12	[40] Laser Cooling of Antihydrogen	EVANS, Andrew
13:24	[57] Precision Antihydrogen Annihilation Reconstructions Using the ALPHA-g Detector	WOOSAREE, Pooja
13:36	[23] Rejecting the Cosmic Ray Background in the ALPHA-g Anti-hydrogen Gravity Experiment	SMITH, Gareth
13:48	[11] Two Photon and Radiation-less Decay of Positronium Molecule	MUBASHER, Muhammad
14:00	[53] The Current Status of the TUCAN Ultracold Neutron Source	STARGARDTER, Shawn

# Friday, 18 February 2022

## Particle Physics: Dark Matter/Rare Decays/High Energy Physics (13:00 - 14:12)

-Conveners: Zisis Papandreou

time	[id] title	presenter
13:00	[64] The DarkLight Experiment at TRIUMF and the Hunt for a New Boson	PACHAL, Katherine
13:24	[49] Status of the KDK Experiment: A Measurement of 40K Relevant for Rare-event Searches	HARIASZ, Lilianna
13:36	[34] ATLAS NSW sTGC Pad Efficiency	BROWN, Leesa
13:48	[9] ATLAS Luminosity Measurement and Long Term Stability Studies with ATLAS-TPX Network During Run-2	USMAN, Muhammad
14:00	[21] Quark and Gluon Jet Response from Dijet and Z/Gamma + Jet Events at ATLAS.	BUNKA, Alex