



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

## Tuesday, February 15, 2022

### Particle Physics (1:00 PM - 2:12 PM)

-Conveners: Thomas Brunner

time	[id] title	presenter
1:00 PM	[27] Upgrade of the ATLAS NSW	SHEPPARD, Damian
1:12 PM	[55] Search for Long Lived Particles with Innovative Tracking Algorithm in the ATLAS Experiment	HANIF, Hamza
1:24 PM	[17] Search for Vector-like Leptons in Multi-lepton Final States with the ATLAS Detector	MCCRACKEN, Callum
1:36 PM	[14] MUTE: A Modern Calculation of Deep Underground and Underwater Cosmic Ray Muons	WOODLEY, William
1:48 PM	[16] Toward Understanding the Nuclear Efficiency Threshold of Bubble Chamber Detectors	LI, Xiang

# Wednesday, February 16, 2022

## Particle Physics: exotic atoms and fundamental symmetries (1:00 PM - 2:12 PM)

-Conveners: Derek Fujimoto

time	[id] title	presenter
1:00 PM	[58] An Implementation of Atomic Form Factor	ANJUM, Nuzhat
1:12 PM	[40] Laser Cooling of Antihydrogen	EVANS, Andrew
1:24 PM	[57] Precision Antihydrogen Annihilation Reconstructions Using the ALPHA-g Detector	WOOSAREE, Pooja
1:36 PM	[23] Rejecting the Cosmic Ray Background in the ALPHA-g Anti-hydrogen Gravity Experiment	SMITH, Gareth
1:48 PM	[11] Two Photon and Radiation-less Decay of Positronium Molecule	MUBASHER, Muhammad
2:00 PM	[53] The Current Status of the TUCAN Ultracold Neutron Source	STARGARDTER, Shawn

# Friday, February 18, 2022

## Particle Physics: Dark Matter/Rare Decays/High Energy Physics (1:00 PM - 2:12 PM)

-Conveners: Zisis Papandreou

time	[id] title	presenter
1:00 PM	[64] The DarkLight Experiment at TRIUMF and the Hunt for a New Boson	PACHAL, Katherine
1:24 PM	[49] Status of the KDK Experiment: A Measurement of 40K Relevant for Rare-event Searches	HARIASZ, Lilianna
1:36 PM	[34] ATLAS NSW sTGC Pad Efficiency	BROWN, Leesa
1:48 PM	[9] ATLAS Luminosity Measurement and Long Term Stability Studies with ATLAS-TPX Network During Run-2	USMAN, Muhammad
2:00 PM	[21] Quark and Gluon Jet Response from Dijet and Z/Gamma + Jet Events at ATLAS.	BUNKA, Alex