

Session Program

12-15 Apr 2021

IoP 2021 - Joint APP/HEPP/NP Conference

Parallel Stream 7

Edinburgh, Remote

Monday 12 April

13:30

Parallel Stream 7: Nuclear Structure above Sn

Session | Location: Edinburgh, Remote | Convener: Liam Gaffney

13:30-13:45

β -delayed neutron emission from r-process nuclei along the N=82 shell closure

Speaker

Oscar Hall

13:45-14:00

Excited States in the Rare-Earth Nucleus ^{129}Pr

Speaker

Lorna Waring

14:00-14:15

Structure of neutron rich nuclei in the ^{132}Sn region

Speaker

Tom Parry

14:15-14:30

Identification of sub- μs isomeric states in the odd-odd nucleus ^{178}Au .

Speaker

Stephen Gillespie

14:30-14:45

Calculated octupole spectra near Pb-208 with a time-dependent method

Speaker

Paul Stevenson

14:45-15:00

Developing a charge plunger method for lifetime measurements in the heavy elements

Speaker

Jacob Heery

15:00

Tuesday 13 April

14:45

Parallel Stream 7: Nuclear Astrophysics 1

Session | Location: Edinburgh, Remote | Convener: Carlo Bruno

14:45–15:00 **Nucleosynthesis inside common envelope accretion**

Speaker

Alexander Hall-Smith

15:00–15:15

The $^{22}\text{Ne}(\alpha, n)^{25}\text{Mg}$ reaction rate and its key role in low metallicity AGB stellar nucleosynthesis

Speaker

Umberto Battino

15:15–15:30

Investigating The Astrophysical s-Process with DRAGON: Direct Measurement of the $^{22}\text{Ne}(\alpha, \gamma)^{26}\text{Mg}$ Reaction

Speaker

Shaheen Jazrawi

15:30–15:45 **^{21}Ne and the Lighter Heavy Elements**

Speaker

Cameron Angus

15:45–16:00

New measurement of oxygen-15 alpha capture for neutron stars in binary systems through radioactive ion beam alpha transfer

Speaker

Jennifer Sanchez Rojo

16:00–16:15 **How good a poison is ^{16}O ?**

Speaker

Philip Adsley

16:15

Thursday 15 April

11:30

Parallel Stream 7: Nuclear Astrophysics 2

Session | Location: Edinburgh, Remote | Convener: Dr James Smallcombe

11:30-11:45

Mass measurement and energy level analysis of ^{190}Re using the Q3D magnetic spectrograph

Speaker

Mark Griffiths

11:45-12:00

The $^{12}\text{C}+^{12}\text{C}$ fusion cross-section at sub-coulomb barrier energies

Speaker

Jose Gustavo Vega Romero

12:00-12:15

Developing an Active-Target detector for studying nuclear reactions of astrophysical significance

Speaker

Soham Chakraborty

12:15-12:30

The Impact of Nuclear Physics Uncertainties on Nucleosynthesis in the First Stars

Speaker

Samuel Lloyd

12:30