

**The 11<sup>th</sup> European Summer School on Experimental Nuclear Astrophysics**  
**Aula "E. Migneco", INFN-LNS, Catania**  
**12-19/06/2022**  
**Young Researchers Sessions**

**I SESSION, 13.06 AFTERNOON**

- 1) Gesue R. *"The challenging direct measurement of the 65 keV resonance strength in  $^{17}\text{O}(p,\gamma)^{18}\text{F}$  at LUNA"*
- 2) Amaducci S. *"Measurement of  $^{140}\text{Ce}(n,\gamma)$  cross section at n\_TOF"*
- 3) Skowronski J. *"Study of proton captures on carbon isotopes at LUNA"*

**II SESSION, 14.06 MORNING**

- 4) Okawa K. *"Direct measurement of  $^{26}\text{Si}(\alpha,p)^{29}\text{P}$  reaction for the nucleosynthesis in the X-ray burst at CRIB"*

**III SESSION, 15.06.MORNING**

- 5) Pogliano F. *"Indirect measurement of the  $^{126}\text{Sb}(n,\gamma)^{127}\text{Sb}$  cross section from the experimental level density and  $\gamma$ -strength function"*

**IV SESSION, 15.06 AFTERNOON**

- 6) Li K.C.W. *"Investigating the predicted breathing-mode excitation of the Hoyle state"*
- 7) Petruse T. *"Direct measurement of the  $^{19}\text{F}(p,\alpha)^{16}\text{O}$  reaction"*
- 8) Markova M. *"Nuclear level densities and  $\gamma$ -ray strength functions of  $^{120,124}\text{Sn}$  and their application in astrophysics"*

**V SESSION, 16.06 MORNING**

- 9) Mishra B. *"Overview of Numerical Simulation for calculating In-Plasma beta-decay rates in the framework of PANDORA Project"*
- 10) Prajapati P.M. *"Cross section of proton capture reactions on Se and Mo isotopes relevant to the astrophysical p-process"(on behalf of Mukherjee S.)"*

**VI SESSION, 16.06 AFTERNOON**

- 11) Naselli E. *"Laboratory magnetoplasmas as experimental environment for the beta-decay investigations of astrophysical interest"*
- 12) Perrotta S.S. *"Sub-Coulomb barrier penetration for a  $^6\text{Li}$  with a clustered and deformed ground-state"*
- 13) Pidatella A. *"On the impact of compact binary ejecta opacity on kilonova transient signals"*
- 14) Prajapati P.M. *" $^{13}\text{C}(\alpha,n)^{16}\text{O}$ : the potential source of neutrons for the s-process"*
- 15) Midhun C.V. *" $^7\text{Li}(n,\gamma)^8\text{Li}$  Cross section using ToF Tagged Neutrons"(t.b.c.)"*

**VII SESSION, 17.06 MORNING**

- 16) Bar T. *"Study for the long-lived gamma background due to neutron emitting calibration reactions"*
- 17) Wieser A. *"Accelerator Mass Spectrometry of  $^{134}\text{Cs}$  &  $^{135}\text{Cs}$  for nuclear astrophysics"*

**VIII SESSION, 17.06 AFTERNOON**

- 18) Clisu-Stan C. *"Cross section measurements of low-energy charged particle induced reactions using moderated neutron counter arrays" (t.b.c.)"*
- 19) Dimitrakopoulos N. *"Experimental study of  $^{37}\text{Cl}(\alpha,n)^{40}\text{K}$  reaction in order to constrain the reaction rate of  $^{40}\text{K}$  in stars"*

- 20) Basak D. *"Study of ( $\alpha,n$ ) reactions to determine the  $\alpha$ -optical potential for  $\gamma$ -process"*
- 21) Godos-Valencia D. *"Experimental studies of the  $^{46}\text{Mn}$  beta-decay channel and spectroscopy of  $^{46}\text{Cr}$  at LISE\_GANIL"*
- 22) Kern M. *"Towards the measurement of live  $^{182}\text{Hf}$  from deep-sea ferromanganese crusts by accelerator mass spectrometry"*
- 23) Shahina S. *"Direct measurement of the low energy resonances in  $^{22}\text{Ne}(\alpha,\gamma)^{26}\text{Mg}$  reaction"*

**IX SESSION, 18.06 MORNING/AFTERNOON (AULA AZZURRA)**

- 24) Paulsen W. *"Reassessment of the radiative width of the Hoyle State"*
- 25) Cassisa A. *"Throughout the ACTAR TPC performances for Nuclear Physics measurements"*
- 26) Oliva A.A. *"The  $^{12}\text{C} + ^{16}\text{O}$  fusion reaction in carbon burning: study at energies of astrophysical interest using the Trojan Horse Method"*
- 27) Triggiani F. *"Relativistic quantum theory and ab initio simulations of electroweak decay spectra in nuclei of astrophysical interest" (t.b.c.)*
- 28) Tsintari P. *"(p,n) reaction measurements in inverse kinematics with SECAR"*