ABSTRACTS SELECTED AS CONTRIBUTED TALKS

Session: Big-Bang Nucleosynthesis and Early Universe

#2. "Neutron induced reactions for BBN: the Trojan Horse approach", <u>G. Pizzone</u> (Italy)#30. "Ending the second cosmological Li problem", <u>E. Wang</u> (Sweden)

Session: Stellar Abundances I - Spectroscopy, Meteorites, Solar System Abundances, EMP...

#7. "Origin of α-poor Very Metal-poor Stars", <u>S.K. Jeena</u> (India)

#19. "R-Process Alliance: unveiling the abundance patterns of ten r-II stars through homogeneous spectral analysis", <u>M. Racca</u> (Sweden)

#102. "3D NLTE abundance of iron-peak and neutron-capture elements within GCE context", <u>N. Storm</u> (Germany)

#147. "Nature's Fission Fragment Distribution", E. Holmbeck (USA)

#164. "The heavies in CEMP", R. Muhammed (India)

#246. "Examinating evidence for a shorter ¹⁴⁶Sm-¹⁴²Nd chronology in the early solar System", <u>Y.</u> <u>Qian</u> (China)

Session: Stellar Abundances II - Presolar Grains

#111. "Correlated heavy isotope signatures in presolar SiC", <u>A. Davis</u> (USA)
#230. "The Impact of Extra Mixing in Low-Mass Stars on Presolar Grain Abundance Predictions", <u>M. Cockshutt</u> (Canada)

Session: Nuclear Reactions. Experiments

#13. "Determining neutron-induced reaction cross sections with surrogate reactions in inverse kinematics at heavy-ion storage rings", <u>C. Berthelot</u> (France)

#95. "Experimental investigation on the γ -emission probability of the unbound states in ¹³¹Sn through ¹³⁰Sn(d,p)¹³¹Sn reaction measurement for understanding r-process", <u>S. Bae</u> (Japan) #129. "Direct measurement of the carbon-carbon fusion cross section at stellar energies", <u>Y. Li</u> (China)

#155. "Underground Measurements of the ¹⁶O(p, γ)¹⁷F Reaction at LUNA", <u>D. Robb</u> (UK) #210. "The results of the ²⁰⁴Tl and ²⁰⁵Tl neutron capture cross section measurement at n_TOF (CERN) and their impact to the s-process-only ²⁰⁴Pb and ²⁰⁵Pb production", <u>F. Calviño</u> (Spain) #228. "Investigation of ³¹P levels near the proton threshold by Nuclear Resonance Fluorescence and the impact on the ³⁰Si(p, γ)³¹P thermonuclear rate", <u>D. Gribble</u> (USA)

Session: Neutrinos

#172. "Collective neutrino oscillations and the heavy-element nucleosynthesis in supernova", <u>X. Wang</u> (China)

#219. "Neutrino Oscillations in Post-Merger Disks", K. Lund (USA)

Session: Stellar Evolution I. Hydrostatic Evolution, AGBs, Massive Stars, s-process

#25. "The Role of Carbon-Oxygen Shell Interactions in the Nucleosynthesis and Final Fate of Massive Stars", <u>L. Roberti</u> (Italy)

#158. "Nucleosynthesis and wind yields of Very Massive Stars", <u>E. Higgins</u> (Ireland)
#169. "Comparing the Elemental Yields from Low-Mass Single and Binary Star Populations", <u>Z.</u>
<u>Osborne</u> (Australia)

#202. "Common Envelope Nucleosynthesis: investigation into how nucleosynthesis can vary across different neutron star common envelope binaries", <u>A. Hall-Smith</u> (UK)

Session: Stellar Evolution II. XRBs and Novae

#68. "H-triggered X-ray Bursts on Slowly Accreting Neutron Stars", <u>S. Casten</u> (USA)
#131. "Weak rp-process nucleosynthesis in low-metallicity novae explosions", <u>T. Psaltis</u> (USA)

Session: Stellar Evolution III. SNe, Kilonovae, Mergers, r- and p-Process

#36. "Nucleosynthesis in core-collapse supernovae", <u>A. Arcones</u> (Germany)
#52. "Neutrino-Mass Hierarchy and The Roles of Radioactive Nuclear Reactions in Explosive Nucleosynthesis of Supernovae, Collapsars and Mergers", <u>T. Kajino</u> (China)
#177. "Probing Pair-Instability Supernovae via ⁵⁶Ni Decay Signatures", <u>R. Sawada</u> (Japan)
#234. "3D Simulations of White Dwarf-Main Sequence Star Collisions", <u>C. van der Merwe</u> (South Africa)

Session: High-Density Matter. EOS of Neutron Stars

#58. "New Constraints on the Neutron Star Equation of State", <u>M. Mendes</u> (Germany) #225. "Core-collapse supernova simulations based on the new HWS EOS", <u>G. Navó</u> (Spain)

Session: Atomic and Nuclear Inputs for Nuclear Astrophysics

#92. "Mass Measurements of Exotic Neutron-Deficient Nuclides Below ¹⁰⁰Sn at IGISOL and Their Astrophysical Implications", <u>Z. Ge</u> (Finland)
#179. "Comprehensive Atomic Data for Kilonova Spectral Modeling Beyond the Photospheric Phase", <u>R. Ferreira da Silva</u> (Portugal)

Session: Galactic Chemical Evolution

#18. "Galactic chemical Evolution with short lived radioactive isotopes", <u>B. Wehmeyer</u> (Poland)
#67. "26Al: how to model a short-lived radioactive isotope - from a 1D to a 2D approach", <u>A. Vasini</u> (Italy)

Session: New Facilities and Techniques

#123. "Investigating explosive nucleosynthesis through measurements of (α,n) and (p,n) reactions using SECAR", <u>P. Tsintari</u> (USA)

#144. "Nuclear Astrophysics with Stored Highly Charged Radioactive Ions", <u>Y. Litvinov</u> (Germany)

#150. "Neutron-Induced Reactions in a High-Density Inertial Confinement Plasma and Their Nuclear Astrophysics Nexus", <u>M. Paul</u> (Israel)

#154. "Direct measurement of neutron capture on radioactive isotopes at CERN n_TOF", <u>C.</u> <u>Domingo-Pardo</u> (Spain)

#183. "Nuclear astrophysics activities at CENS", K.I. Hahn (Korea)

#220. "The E1 and E2 capture amplitudes in ${}^{12}C(\alpha, \gamma){}^{16}O$ around the 2.42 MeV resonance", <u>K.</u> <u>Chakraborty</u> (Italy)

Session: Nuclear Theory

#118. "Bayesian Uncertainty Quantification of Alpha Elastic Scattering to Constrain the α Optical Model", <u>C. Marshall</u> (USA)

#142. "Microscopic description of β-decay rates of r-process Nuclei", <u>D. Alvear-Terrero</u> (Germany)