

International Symposium on Nuclear Astrophysics (ISNA -2023)

Manipal Academy of Higher Education, Manipal - 576104

October 30 – November 3, 2023

List of contributed papers

No.	Title & Author affiliation	Mode of Presentation
Oral		
1	Rapidly Rotating Massive Pop III stars: A Solution for High Carbon Enrichment in CEMP-no Stars Jeena S K et al (IIT, Palakkad)	Oral -1
2	Tracing the origin of the neutron-capture elements in the metal-poor star HE 1244-3036 Debasish Dutta^{1, 2} and Aruna Goswami (IIA, Bangalore)	Oral - 2
3	Probing the distinct chemical history of Milky Way's Halo and old thick disk through HESP-GOMPA survey Pallavi Saraf et al (IIA, Bangalore)	Oral -3
4	Breakup reactions from ${}^7\text{Be} + {}^{12}\text{C}$ at 5 MeV/u R. Mitra et al (BOSE Institute, Kolkata)	Oral - 4
5	Vanishing of Resonances in ${}^6\text{Li}(n,\gamma)$ Excitation function on the impact of Breakup Couplings Midhun C v et al (University of Calicut, Calicut)	Oral -5
6	Multi-Nucleon Transfer Reactions: A New Tool for Nucleosynthesis H.M. Devaraja et al (JINR, Russia)	Oral -6
7	Quest for (α, n) reaction cross-section on ${}^{27}\text{Al}$ R. Roy et al (ELI-NP, Romania/IIT Ropar)	Oral - 7
8	Plasma Induced Variation of β-Decay Rates in PANDORA	Oral - 8

	Bharat Mishra et al (INFN-LNS, Italy)	
9	Exploring Enhanced Carbon-12 Production in Astrophysical Environments through Inverse MACS Abhijit Baishya et al (BARC, Mumbai)	Oral -9
10	Measurement of the low energy resonances in $^{22}\text{Ne}(\alpha,\gamma)^{26}\text{Mg}$ and $^{22}\text{Ne}(\alpha,n)^{25}\text{Mg}$ reaction Shahina et al (Notra Dame University, USA)	Oral - 10
11	Proton induced reaction on ^{108}Cd for p-process study Sukhendu Saha et al (SINP, Kolkata)	Oral - 11
12	Significance of large collective enhancement factor of nuclear level density on radiative neutron capture cross-sections T. Santhosh et al (BARC, Mumbai)	Oral -12
13	Determining the Structure of Exotic Atomic Nuclei in Astrophysical Explosions Nisha Singh (Ohio University, USA)	Oral - 13
14	Structure effects of light and medium mass exotic nuclei in estimating abundances in explosive nucleosynthesis Jinti barman et al (IIT. Roorkee)	Oral -14
15	Cross section measurement of $^{144}\text{Sm}(p, \gamma)$ reaction for astrophysical p-process study using Activation techniques Tanmoy Bar et al (SINP, Kolkata)	Oral -15
Posters		
1	Theoretical study of proton induced reaction on p-nuclei of Ruthenium R. Makwana et al (M. S. University of Baroda)	Poster - 1
2	TALYS Calculations for proton capture on Sn Isotopes M.Twisha¹ and A.Mukherjee (SINP, Kolkata)	Poster -2
3	Calculating the astrophysically relevant cross sections of the Sr isotopes using the Hauser-Feshbach model for the p – process	Poster - 3

	Vinay Gurav and Rajesh M. Mudaliyar (Bhawan's college, Mumbai)	
4	To study the influence of fission fragment mass distributions on r-process nucleosynthesis through the utilization of the GEF Model Punit Dubey and Ajay Kumar (BHU, Varanasi)	Poster - 4
5	Thermonuclear reaction rate and s-factor of $^{96,98}\text{Ru}(p,\gamma)$ reaction for the p-process Mahima Upadhyay and A. Kumar (BHU, Varanasi)	Poster - 5
6	Experimentally measured cross sections for (γ,n) nuclear reactions for ^{144}Sm and ^{154}Sm induced by bremsstrahlung photons G. T. Bholane et al (Pune University)	Poster - 6
7	Impact of Neutron Skin Thickness on Astrophysical S-factor Tanmoy Ghosh (SINP, Kolkata)	Poster - 7
8	Photodisintegration of lithium at the range of energies of interest to astrophysics Aswathi V et al (CHRIST University, Bangalore)	Poster - 8
9	Insights into neutron poisoning reaction $^{13}\text{C}(n, \gamma)^{14}\text{C}$ for astrophysical processes Aquib Siddique et al (AMU, Aligarh)	Poster - 9
10	Theoretical Analysis of Proton Polarization in $d(\vec{\gamma}, \vec{p})n$ at Astrophysical Energies M. Kusuma et al (CHRIST University, Bangalore)	Poster - 10
11	Modified Gravity Approach to Compact Star Study in $f(R, T)$ Model Premachand Mahapatra, Prasanta Kumar Das (BITS Pilani, Goa Campus)	Poster - 11
12	Empirical model for electron captured half-lives.	Poster -12

	Susheela R S (Department of Physics, Govt. First Grade College, Nanjangud-571301, Karnataka)	
13	<p>Connecting neutron stars observables to nuclear matter parameters within a multivariate analysis</p> <p>N. K. Patra et al (BITS Pilani, Goa Campus)</p>	Poster - 13
14	<p>Nucleosynthesis in trans-iron region</p> <p>Hitendra Sarkar and Lakhyajit Sarma (Gauhati University, Guwahati)</p>	Poster - 14
15	<p>Studies on $^{10}\text{B}(p,p'g)^{10}\text{B}$ reaction</p> <p>V. Ranga et al (IIT, Roorkee)</p>	Poster - 15
16	<p>Study of $^{113}\text{In}(\alpha,\gamma)$ reaction at astrophysical energy region</p> <p>Dipali Basak et al (SINP, Kolkata)</p>	Poster - 16
17	<p>Exploring the evolutionary link between Barium dwarfs and giants using asteroseismology</p> <p>Lupamudra Sarmah and Bharat Kumar Yerra (IIA, Bangalore)</p>	Poster - 17