## **International Conference on Nuclear Physics and Applications**

(ICNPA-2024)

## $University\ of\ Delhi,\ Delhi-110007$

October 21st - 25th, 2024

Venue: Conference Center, near Gate No. 4, University of Delhi (North Campus), Delhi.

## **Program Schedule (Tentative)**

Arrival day: 20th October 2024

Monday, 21st October 2024					
08:30 - 09:45	Registration				
09:45 - 10:30	High Tea				
10:30 – 11:15	Inauguration of ICNPA -2024				
Theme: General					
Session -I (Chair:)					
Time	Name of Speaker		Title		
11:15 – 11:55	Andrei Andreyev	Abrup	ot shape changes and shape coexistence studied		
	University of York, UK	-	source laser spectroscopy across the lead region DLDE-CERN		
11:55 – 12:20	Robert Bark, iThemba LABS, South Africa	Facili	ities and research at iThemba LABS		
12:20 – 12: 45	B. P Singh Aligarh Muslim University, Aligarh, India	and P	ring the Intricacies of Breakup in Low-Energy seudo Transparency in Fermi Energy Region y Ion Collisions		
12:45 – 13:25	Rudrajyoti Palit, Tata Institute of Fundamental Research, Mumbai, India	_	uing Aspects of Octupole Collectivity in ic Nuclei		
13:25-14:30	1	Lunch Break			
	Theme: Nuclear Reaction (NR) a	nd Nuc	lear Structure (NS)		
	Session -II : (Cha	ir(s)	)		
14:30 : 16:10	Parallel Session –IA		Parallel Session –IB		
	Ajay Tyagi, Banaras Hindu University, Varanasi, India Title: Time of flight and Tagged Neutron spectroscopy: Tools to study Nuclear Reactions  Contributed Talks: CNR-01 to CNR-05				
16:10- 16:30	Coffee/ Tea Break				
16:30–17:45 <b>POSTER SESSION-1</b> 50 Posters		ers			
	PNR-01 to PNR-25, PNS-0 PNA-01 to PNA-05,	1 to PN	IS -10 PANT-01 to PANT-05, PNI-01 to PNI-05		

Tuesday, 22 <sup>nd</sup> October 2024				
Theme: Nuclear Reaction (NR)  Session -I (Chair:)				
9:15 – 9:55	S. Santra, Bhabha Atomic Research Centre, Mumbai, India	Recent highlights of nuclear physics research in BARC		
9:55 – 10:20	Enrique Nacher, Instituto de Física Corpuscular (CSIC- UV), Spain	Nuclear data and instrumentation for Applications from ocean acidification to theranostics		
10:20 – 10:45	Robert Gazywacz, University of Tennessee, USA	Beta-delayed neutron emission - intersections of nuclear structure and statistical models		
10:45 – 11:10	I.M. Govil, Panjab University, Chandigarh, India	Nuclear reaction studies with heavy ion beams		
11:10-11:30	Coffee/ Tea Break			
Theme: (Particle Accelerators and Instrumentations)				
	Session -II (Chair	r:)		
11:30-12:10	Chandana Sumithrarachchi Michigan State University, USA	Production of Low Energy Beams at FRIB		
12:10 – 12:50	Daisuke Suzuki, RIKEN NishinaCenter, Tokyo, Japan	Advances in nuclear science at RI Beam Factory		
12:50-13:15	<b>Tanuja Dixit,</b> SAMEER-India, Mumbai, India	Development of 30 MeV High Energy Linac for Medical and other applications		
13:15 -14:30	Lunch Break			
	Theme: Nuclear Reaction (NR) an	d Nuclear Astrophysics (NA)		
	Session -III (Cha	air(s):)		
14:30 : 16:10	Parallel Session –IIA	Parallel Session –IIB		
	Neeraj Kumar, IPHC, Strasbourg, France Title: Fission studies at VAMOS++ @ GANIL using inverse-kinematics	Shubhchintak, Punjabi University Patiala, India Title: Recent Developments in Nuclear Transfer Reactions Using the Lagrange-Mesh and R-matrix methods		
	Contributed Talks: CNR-06 - CNR-10	Contributed Talks: CNA-01 to CNA-05		
16:10 – 16:30	Coffee/ Tea Break			
	Theme: Achiever	ment Award		
Session -IV (Chair:)				
16:30 - 17:45	Lifetime contribution Award			
18:30 – 21:30	Cultural Program followed by Dinner			

Wednesday, 23 <sup>r</sup>	rd October 2024				
	Theme: Nuclear Struc	eture			
	Session -I (Chair:)				
Time	Name of Speaker	Title			
9:15 – 9:55	Pieter Doornenbal,	Recent highlights on in-beam gamma spectroscopy atRIB			
	RIKEN Nishina Center, Japan	and future perspectives			
9:55 – 10:20	Tumpa Bhattacharjee, VECC,	Developments on lifetime measurements with fasttiming			
	Kolkata, India	scintillation detectors: Study of exotic structures in nucle			
10:20 - 10:45	R.P. Singh,	Lifetime measurements with INGA detector facility at			
	IUAC, Delhi	IUAC, Delhi.			
10:45 – 11:10	Smarajit Triambak,	Nuclear spectroscopy relevant for fundamental symmetry			
	University of the Western Cape,	tests: Some examples from odd-odd nuclei			
	South Africa				
11:10-11:30		Coffee/ Tea Break			
Theme: Nuclear Reaction and Nuclear structure					
	Session -II (	(Chair(s):)			
11:30 -13:10	Parallel Session –IIIA	Parallel Session –IIIB			
	S. Appanababu,	Anand Pandey,			
	Andhra University, India	University of Delhi			
	Title: Revisiting Stelson model	<b>Title:</b> Exploring octupole correlations in the neutro			
	with weakly bound projectiles	deficient nuclei with $Z \sim 56$ and mass $A \sim 120$			
	Contributed Talks:	Contributed Talks:			
	CNR-11 to CNR-15	CNS -06 to CNS-10			
13:10-14:30		Lunch Break			
	Theme: Nuclear Structure and	Nuclear Astrophysics/Application			
	Session -III	I ( Chair(s):_)			
14:30 : 16:10	Parallel Session –IVA	Parallel Session IVB			
11.50.10.10	Tarkeshwar Trivedi,	Saneesh N.,			
	Allahabad University, India	IUAC, Delhi			
	<b>Title:</b> Exploring Insights into	Title: Study of heavy-ion induced fission in actinide			
	Symmetric and Asymmetric	nuclei through fragment-neutron correlation			
	Nuclear Structures	measurements			
	Contributed Talks:	Contributed Talks:			
	CNS-11 to CNS-15	CNA-06, CANT-01 to CANT-04			
16:10 - 16:30		Coffee/ Tea Break			
16:30 – 17:30	Popular Lecture (to be announced				
10.00 22.00	later)				
19:00 - 22:00	Conference Dinner				

Thursday, 24 <sup>th</sup> October 2024					
	Theme: Nucle	ear Applicatio	on		
Session -I (Chair:)					
Time	Name of Speaker		Title		
9:15 – 9:55	Jean-Michael Daugas Institute Laue-Langevin (ILL), Grenoble, France	Nuclear s	spectroscopy for medical applications		
9:55 – 10:20	Rakesh C. Ramola, H.N.B. Garhwal University, Srinagar, Garhwal, India	Character	in High Background Radiation Areas ristics, Exposure, Health Effects, and ment Techniques		
10:20 – 10:45	Sushil Sharma, Jagiellonian University, Poland	Advancir	ing Multi-photon Detection with J-PET ng Fundamental Physics and Medical Imaging Positronium Decay Studies		
10:45 – 11:10	Sanjay Rajput, Sriram Institute for Industrial Research, Delhi, India		radiations for various Industrial Applications Institute for IndustrialResearch, Delhi		
11:10-11:30	Coffee/ Tea Break				
	Theme: Nuclear Application	and Nuclear	Instrumentation		
		Chair(s):			
11.20.12.10	Parallel Session –VA		Parallel Session –VB		
11:30-13:10	Pushpendra P. Singh, IIT Ropar, India		Nikit Deshmukh, P P Savani University, Surat		
	<b>Title:</b> Spectroscopy of agriculture land soil samples for radioisotope in				
	Contributed Talks: CANT-05 to CANT-07, CNS-16 to CNS-17		nuclear reactions using tightly bound beams  Contributed Talks:		
			CNI-01 to CNI-05		
13:10 -14:30	Lunch Break				
14:30 –17:30	Free Day / IUAC Visit				

Friday, 25 <sup>th</sup> October 2024					
	Theme: Gene				
	Session -I (Chair:)				
Time	Name of Speaker	Title			
9:15 – 9:55	Gopal Mukherjee, VECC, Kolkata, India	Investigation of exotic modes of nuclear excitation using light and heavy-ion beams at VECC			
9:55 – 10:20	Avazbek Naisrov, Joint Institute for Nuclear Research, Russian Federation	The effect of the entrance channel properties in formation of the reaction products in heavy ion collisions			
10:20 – 10:45	Yogesh Gupta, Bhabha Atomic Research Centre, India	Noble features in heavy-ion-induced fission using different particle emissions			
10:45 – 11:10	Praveen Srivastava, IIT Roorkee, India	Ab initio no-core shell-model description oflighter nuclei			
11:10-11:30	Coffee/ Tea Break				
11:30–13:10	Poster Session-II  50 posters  PNR-25 to PNR-53, PNS-11 to PNS-28, PANT-06 to PANT-07,  PNA-06 to PNA-07				
13:10-14:30	Lunch Break				
	Theme: Nuclear Reaction an	d Nuclear Structure			
	Session -II (Chai	r(s))			
14:30-15:30	Parallel Session –VIA	Parallel Session –VIB			
	Contributed Talks:	Contributed Talks:			
	CNR-16 to CNR-20	CNS-18 to CNS-21			
15:30 – 16:30	,	Summary Talk			
	Prize Distribution and Conclusion of the Conference				
16:30 – 17:00		Coffee/ Tea			
	Departure				

**Departure Day: 26/10/2024**