

Abstracts selected for Contributory Talk @ ICNPA-2026 Conference

S No.	Code	Name	Affiliation	Abstract
1.	CT-ADFA-01	Dr. Mohammed Mohisin Khan	Department of Applied Physics, Aligarh Muslim University, Aligarh.	A Study of Maximum Pseudorapidity Gap Fluctuations in Hadronic and Nuclear Interactions at High Energies
2.	CT-ADFA-02	Kamaljeet Singh	Indian Institute of Technology Indore (IN)	Design of Lightweight Alloy-based Materials for Next-Generation Beampipe Applications in Particle Accelerators
3.	CT-ANPT-01	Aaryaan Reyaz	Amity Institute of Nuclear Science & Technology, AUUP, Noida, U.P.	Gamma-ray scanning for blockage identification & quantification in industrial pipelines
4.	CT-ANPT-02	Ankit Singh, Mansimran Kaur , Dhruv Dhayal, Abhishek Yadav and Alpana Goel	Amity Institute of Nuclear Science & Technology, Amity University Uttar Pradesh, Noida, India	RADMAP - a multi-sensor RADiation MAPping device using Raspberry-Pi
5.	CT-ANPT-03	Deelak Raj	Nuclear Research Laboratory, Department of Physics HNB Garhwal University SRT Campus, Badshahi Thaul, Tehri Garhwal	Estimation of Retrospective Radon Progeny Concentrations in Dwellings Based on ^{210}Po Activities Implanted in Different Glass Objects: A Case Study from Billawar, J&K
6.	CT-ANPT-04	Dr. Devendra Raj Upadhyay	Department of Physics, Amrit Campus, Institute of Science and Technology, Tribhuvan University	Characterization and Radiation Shielding Properties of Natural Rocks from Central Nepal: Experimental Analysis and PHITS Simulation
7.	CT-ANPT-05	DR. SANDEEP KUMAR SRIVASTAVA	Central Institute of Technology 8Kokrajhar, Assam (9Deemed-to-be un8iversity under MoE, Gov of India)	Probing the Magnetic Properties of Rare-Earth-Free Nanostructured Permanent Magnets using Nuclear Physics Techniques

8.	CT-ANPT-06	NAZNEEN HUSAIN CHOUGLE	Research Scholar & Medical Physicist	Phantom study to find Robustness of Computed Tomography Radiomic Features & its Comparison between Homogeneous Medium and Heterogeneous Medium.
9.	CT-ANPT-07	Nigam Singh Silwal	Tribhuvan University, Central Department of Environmental Science	Geogenic Control of Natural Radioactivity Across Three Physiographic and Tectonic Regions Of Eastern Nepal: A PGIS-2 Gamma-Ray Spectrometric Survey
10.	CT-ANPT-08	Satya Seshavatharam U V	(1) Honorary faculty, I-SERVE, Survey no-42, Hitech city, Hyderabad- 84,Telangana, India. (2) Quality Assurance Dept, Casting, DIP Division, Electrosteel Castings Ltd, Srikalahasthi, AP, India.	Cold Nuclear Fusion via the 4G Electroweak Model: Proposed Tests in Iron, Magnesium and Gallium
11.	CT-ANPT-09	Soniya	IIT Roorkee	Optimal control synthesis of double-quantum pulses in spin-1 open quantum systems
12.	CT-FS-01	Dr. Garima Punetha	LSM Campus Pithoragarh SSJ University Uttarakhand	Glueball Spectrum and Non-Perturbative Dynamics in Dual QCD
13.	CT-NA-01	Ashique Yoosaf S A	Bhabha Atomic Research Centre, Mumbai	Measurement of $^{66}\text{Zn}(p,\gamma)^{67}\text{Ga}$ and $^{66}\text{Zn}(p,\alpha)^{63}\text{Cu}$ Cross-sections around Gamow Energies
14.	CT-NA-02	Aswathi V	Indian Institute of Astrophysics	Nuclear Interactions in Lithium Photodisintegration at BBN Energies
15.	CT-NA-03	Harsh Chandrakar	Department of Physics, BITS-Pilani K. K. Birla Goa Campus, Goa 403726, India	Effects of poloidal and toroidal magnetic field geometries on proto-neutron star structure

16.	CT-NA-04	Raj Nandani and N. J. Upadhyay	Department of Physics, Amity School of Applied Sciences, Amity University Maharashtra, Panvel - 410206, India	Benchmarking Theoretical Reaction-Rate Formalisms and Piecewise Parameterizations for Iron-Peak and p-Process Seed Nuclei
17.	CT-NA-05	Ritankar Mitra	Bose Institute, Kolkata, India	The $3\text{He}(\alpha,\gamma)^7\text{Be}$ S-factor at Solar Energies : A Bayesian Neural Network Approach
18.	CT-NA-06	Dr. Ashok Kumar Mondal	Department of Physics, Manipal University Jaipur, Rajasthan	The Astrophysical S-factor and Rate of the $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$ Reaction Calculation at Gamow Energy
19.	CT-NA-07	GOURAB BANERJEE	SAHA INSTITUTE OF NUCLEAR PHYSICS	Bayesian Modeling of the Isovector Giant Dipole Resonance: From Nuclear Structure to Nuclear Astrophysics
20.	CT-NI-01	Mohit Kumar	IUAC, IIT Delhi	Probing the reaction dynamics using heavy ion detection systems of scattering chamber facilities of IUAC
21.	CT-NI-02	Priyanka Khandelwal	Department of Physics & Astrophysics, University of Delhi, New Delhi-110007, India	Investigation of Compton Imaging Capabilities in a Position Sensitive Germanium Detector
22.	CT-NI-03	Rahul Chauhan	IIT Roorkee	Efficiency calibration and coincidence summing correction for an annular NaI:Tl detector using β^+ emitters
23.	CT-NRE-01	Ajmira Sultana	Variable Energy Cyclotron Centre	Fission dynamics of the $^{35}\text{Cl} + ^{205}\text{Tl}$ reaction around the Coulomb barrier
24.	CT-NRE-02	Amar Das	1.Gauhati University, Jalukbari, Assam,India, 2. Suren Das College, Autonomous, Hajo	Quasi-elastic scattering excitation function and barrier distribution of $^{16}\text{O}+^{178}\text{Hf}$ system using recoil mass spectrometer
25.	CT-NRE-03	Dr. Malvika	Indian Institute of Technology Roorkee (Roorkee)	Fusion hindrance in the $^{32}\text{S}+^{138}\text{Ba}$ system at sub-barrier energies

26.	CT-NRE-04	Dr. Vishal Srivastava	Amity school of Engineering and Technology, Amity University Patna, Patna-801503, Bihar, India.	Optical Model Potentials in Elastic Scattering: Implications for Nuclear Structure and Reactions
27.	CT-NRE-05	Gobind Ram	University of Lucknow	Interplay of Nuclear Deformation and Transfer Q-Value on Fusion: A Systematic Study
28.	CT-NRE-06	GOVIND KUMAR	ALIGARH MUSLIM UNIVERSITY	Study of $^{22-35}\text{Na}+^{12}\text{C}$ reaction cross sections at 240 MeV/nucleon
29.	CT-NRE-07	Hanuman Verma	Bareilly College, Bareilly, M j p Rohilkhand University, Bareilly Uttar Pradesh India	Generation of Cross-Section Data of $^{196-194}\text{Au}$ by Using K-Nearest Neighbors (KNN) Algorithm in $(\alpha, \alpha xn)$ Reactions
30.	CT-NRE-08	Mahima Upadhyay	Banaras Hindu University	Probing nuclear fission through fragment mass distributions in actinide region
31.	CT-NRE-09	Nancy Garg	IIT Ropar	Fusion Dynamics of weakly bound projectile ^9Be at near barrier energies
32.	CT-NRE-10	Niloy Ghosh	Bose Institute	One-neutron and α -transfer channels in the nuclear reaction $^{12}\text{C}(^7\text{Be}, ^8\text{Be}^*)^{11}\text{C}^*$
33.	CT-NRE-11	Mohd Imran	ALIGARH MUSLIM UNIVERSITY	Charge and Matter Radii of $^{58-77}\text{Ni}$ Isotopes from Charge-Changing and Interaction Cross Sections
34.	CT-NRE-12	Punit Dubey	Banaras Hindu University	Mass–TKE Correlations in the Fusion–Fission of $^{214}\text{Ra}^*$
35.	CT-NRE-13	Rajat Kumar Sahu	University Of Delhi	Systematics Study of Nuclear Dissipation Strength in Fission Dynamics of Cm Isotopes
36.	CT-NRE-14	RITIKA DATTA	Bhabha Atomic Research Centre/Variable Energy Cyclotron Centre, Kolkata	Neutron spectrometry in $^{11}\text{B}(p,n)^{11}\text{C}$ reaction.

37.	CT-NRE-15	Saneesh Nedumbally	Inter-University Accelerator Centre (IUAC)	Experimental and theoretical insights into the fission modes of Ra and Pa
38.	CT-NRE-16	Saumyasucharita Sahu	BARC, Mumbai	Fission Fragment Mass and Total Kinetic Energy Distributions in Transfer-Induced Fission of $6,7\text{Li} + {}^{232}\text{Th}$
39.	CT-NRE-17	SHOUVIK PAL	TIFR MUMBAI	Investigation of 3H Capture in the $7\text{Li} + {}^{50}\text{Ti}$ Reaction
40.	CT-NRE-18	Subhankar Maity	Bose Institute, Kolkata	Breakup Studies on the $7\text{Be} + \text{d}$ Reaction at 5 MeV/u
41.	CT-NRE-19	Tustita Jena	PhD Scholar, Department of Physics, School of Applied Sciences, KIIT Deemed to be University, Bhubaneswar	STUDY OF SCATTERING AND FUSION CROSS-SECTIONS OF $6\text{Li} + {}^{90}\text{Zr}$ NEAR THE COULOMB BARRIER
42.	CT-NRE-20	Rupinderjeet Kaur	IIT Ropar	Study of fusion-fission dynamics in the ${}^{12}\text{C} + {}^{193}\text{Ir}$ system
43.	CT-NRE-21	Utkarsha Mishra	Banaras Hindu University	Experimental determination of nuclear reaction cross-section for ${}^{51}\text{V}(\alpha, \text{x})$
44.	CT-NRE-22	Phurba Sherpa	University of Delhi	Angular Momentum Dependence of Fusion Hindrance in ${}^{48}\text{Ti} + {}^{160}\text{Gd}$ and ${}^{30}\text{Si} + {}^{178}\text{Hf}$
45.	CT-NRT-01	Diksha	Thapar Institute of Engineering and Technology, Patiala	Influence of Nuclear Deformations and Orientations on Fusion–Fission and Quasi-Fission in ${}^{202}\text{Pb}^*$
46.	CT-NRT-02	Dr Ranjeet Dalal	Gurugram University	Short-range Nucleon-Nucleon Correlations Inside Atomic Nuclei: Present Understanding and Future Directions
47.	CT-NRT-03	Malvika Naik, Fathimath Thameema, and N. J. Upadhyay	Department of Physics, Amity School of Applied Sciences, Amity University Maharashtra, Panvel - 410206, India	Phase Shift Analysis and Resonance Identification in Low-Energy Nucleon– α Scattering via Exact Nonlocal Potential Treatment

48.	CT-NRT-04	Shilpa Rana	Thapar Institute of Engineering and Technology, Patiala	Exploring Projectile Dependence in the Synthesis of Superheavy Nuclei with a Deformed ^{238}U Target
49.	CT-NRT-05	Venkataramana Shastri	GSSS INSTITUTE OF ENGINEERING and TECHNOLOGY for WOMEN, MYSURU, KARNATAKA	Model-Independent Approach to Coherent Pion Photoproduction on Tensor-Polarized Deuteron
50.	CT-NRT-06	ABHISHEK	Department of Physics, IIT Roorkee	Deformation-Induced K-Splitting in the Isoscalar Quadrupole Response of ^{20}Ne within Real-Time TDHF
51.	CT-NRTQ-01	Aman Jha, Jhilm Sadhukhan, and N. J. Upadhyay	Department of Physics, Amity School of Applied Sciences, Amity University Maharashtra, Panvel - 410206, India	Emulating Nuclear Fission Modeling Using Standard AI-Based Tools
52.	CT-NRTQ-02	Dr. Arunabha Saha	ICFAI University Tripura	Uncertainty-Aware Prediction of (n,p) Reaction Cross Sections Using Bayesian Neural Networks
53.	CT-NRTQ-03	Sushil Ganeshpure	Dept. of Physics, Amity School of Applied Sciences, Amity University Maharashtra	Machine Learning for Nuclear α -Decay Half-Life Prediction via Hybrid Machine Learning and Support Vector Regression
54.	CT-NRTQ-04	HEMANT KUMAR	National Institute of Technology, Kurukshetra	Geant4 Benchmarking and Empirical Parametrization of Charge Changing Cross Section
55.	CT-NSE-01	Aditi Sindhu	Tata Institute of Fundamental Research, Mumbai	Spectroscopy of multiple band structures in ^{129}Xe
56.	CT-NSE-02	AMAN DHANKHAR	Department of Physics & Astrophysics, University of Delhi, Delhi - 110007	Recommendation for polarization asymmetry for stretched quadrupole and dipole transitions based on the compiled polarization asymmetry data
57.	CT-NSE-03	Annanya Mahajan	NIT JALANDHAR	Structural evolution in superdeformed bands of ^{36}Ar and ^{40}Ar

58.	CT-NSE-04	Anupriya Sharma	Inter University Accelerator Center, Aruna Asaf Ali Marg, New Delhi 110067, India	High-Spin Study of ^{183}Ir
59.	CT-NSE-06	Dr. Anuj	Ex-Scholar, Department of Physics & Astrophysics, University of Delhi, Delhi-110007, India	In-beam γ -ray Spectroscopy and Shell Model Calculations for ^{86}Rb
60.	CT-NSE-07	Dr. Khamosh Yadav	Indian Institute of Information Technology (IIIT) Surat	Hindered first-forbidden and allowed β decays of ^{206}At
61.	CT-NSE-08	Indu Bala	Inter-University Accelerator Centre, New Delhi	Lifetime measurement of yrast states in $i13/2$ band of ^{153}Gd nucleus
62.	CT-NSE-09	Mamta Prajapati	Department of Physics, Indian Institute of Technology Bombay, Powai, Mumbai - 400076, Maharashtra, India	Lifetime measurement of the coupled negative-parity band of ^{130}Cs
63.	CT-NSE-10	Ravi Bhushan	Inter University Accelerator Centre (IUAC), Delhi-110067	Review of the structural properties of ^{151}Dy with gamma-ray spectroscopy and lifetime measurement
64.	CT-NSE-11	Suchorita Paul	Variable Energy Cyclotrone Centre, Kolkata	Spectroscopy of yrast and near-yrast states in ^{130}Xe
65.	CT-NSE-12	Yashraj	Inter University Accelerator Centre (IUAC), New Delhi	Evidence of Octupole correlations in ^{73}As
66.	CT-NST-01	Anil Kumar	Center for Computational Sciences, University of Tsukuba, Tsukuba	Ground-State Properties of Light Nuclei with Natural- Orbital No-Core Monte Carlo Shell Model
67.	CT-NST-02	Asmitha M. R.	Cochin University of Science and Technology	Shape transitions of Preactinide nuclei at fission limits via Chebyshev shape parametrization

68.	CT-NST-03	Dr Moti Singh	Greater Noida Institute of Technology, Greater Noida	Nuclear structure of ^{158}Dy using asymmetric rotor model
69.	CT-NST-04	Dr. BirBikram Singh	Pondicherry University	Analysis of competing emergence of ^{12}C and ^{14}C clusters from $^{216-226}\text{Ra}$ isotopes
70.	CT-NST-05	Dr. Devesh Kumar	Variable Energy Cyclotron Centre, Kolkata	Large-Basis Shell-Model Investigation of Odd-A Tellurium Isotopes: Emergence of Collectivity and Transitional Behavior
71.	CT-NST-06	Dr. Surja Kiran Ghorui	Department of Physics, Sumathi Reddy Institute of Technology for Women, Warangal	Hexadecapole deformed configurations in nuclei at high excitation energies
72.	CT-NST-07	G. Saxena	Govt. Women Engineering College, Ajmer-305002, Rajasthan, India	Benchmarking Residual Learning Approaches for Nuclear Mass Predictions
73.	CT-NST-08	Karmjeet Kaur	Akal University	Investigation of Gallagher-Moszkowski Splitting Energies in Even-Even Deformed Nuclei
74.	CT-NST-09	Mamta Aggarwal	Department of Physics, University of Mumbai	Shape Coexistence in Hot Rotating Mo and Ru Isotopes
75.	CT-NST-10	Meena sharma	central university of jammu	Evolution of Excited 0^+ Structures and Shape Coexistence in Neutron-Rich Even-Even $^{94-100}\text{Kr}$ Isotopes
76.	CT-NST-11	MEHAK	Indian Institute of Technology Roorkee	Entanglement entropy and non-local magic for exotic nuclear systems
77.	CT-NST-12	MOHD ILYAS LONE	Department of Physics, Central University Of Kashmir Green Campus, Ganderbal, J&K, 191 131, India	Search for wobbling motion in γ -soft triaxial even-even $^{122-130}\text{Ba}$ isotopes within the triaxial projected shell model approach

78.	CT-NST-13	Nabeel Salim	Indian Institute of Technology Roorkee	Microscopic analysis of the E1 response and collective excitations in deformed nuclei
79.	CT-NST-14	Nandini Patel	University of Delhi	Systematic Study of Band-Crossing Phenomena in MR and AMR Bands in Mass A ~ 60 Region: A Semiclassical Approach
80.	CT-NST-15	Saroj Soodan	Department of Physics and Astronomical Sciences, Central University of Jammu, Samba, J&K, 181143	Microscopic Investigation of Yrast and Near-Yrast Bands in $^{116,118}\text{In}$ Isotopes
81.	CT-NSTQ-01	Ankit Kumar Das	Indian Institute of Technology Roorkee	Resource-Efficient Quantum Simulations of the Nuclear Shell Model via Gray-Code Encoded SSVQE and Error Mitigation
82.	CT-NSTQ-02	Durgesh Pandey 24925011	Indian Institute of Technology Roorkee	Non-Variational Quantum Generator Coordinate Method for Nuclear Structure
83.	CT-NSTQ-03	Gokul A	Cochin University of Science and Technology	Neural-network quantum states for ground-state properties of light nuclei
84.	CT-NSTQ-04	Nisha Chandnani	Department of Physics (H&S), Govt. Women Engineering College, Ajmer, Rajasthan 305002, India and Department of Physics, Manipal University Jaipur, Jaipur, 303007, India	Testing Garvey-Kelson Relations in Machine-Learning corrected Nuclear Mass Models