

# Theme Meeting on Nuclear Lifetimes, Transitions and Moments (NLTM2022)

## PROGRAMME

Date: 1<sup>st</sup> February 2022

INAUGURATION			
No.	Time (IST)	Title	Speaker
1.	2.00 pm – 3.40pm	Inaugural Session	
	3.40pm – 4.00pm	Short Break	
Technical Session – I (keynote) (40+5)			Chair: Dr. S. Kailas
5.	4.00pm – 4.45 pm	Measured transition strengths and nuclear moments: probing the emergence of nuclear collectivity around $^{132}\text{Sn}$	Andrew Stuchbery, Australian National University, Australia
Technical Session –II (25+5)			
Chair: Dr. Sudeb Bhattacharya			
6.	4.45pm – 5.15pm	High-resolution in-beam gamma-ray spectroscopy and lifetime measurements with HiCARI	Kathrin Wimmer, GSI Helmholtz Centre for Heavy Ion Research , Germany
7.	5.15pm – 5.45pm	Lifetime measurements: Impact on high spin nuclear structure studies	Pradip Datta, Anandamohan College, Kolkata
8.	5.45pm – 6.15pm	The Lives of Excited Nuclei & Their Measurements at the Femto Scale	Rajarshi Raut, UGC-DAE-CSR, Kolkata Centre, Kolkata
	6.15pm – 6.30pm	Short Break	
Technical Session –III (25+5)			Chair: Dr. Ranjan Bhowmik
9.	6.30pm – 7.00pm	Recent Results from Digital INGA and Development of Ancillary Detectors	Rudrajyoti Palit, Tata Institute of Fundamental Research, India
10.	7.00pm – 7.30pm	Spectroscopy and lifetime measurements with GRETINA	Hironori Iwasaki, Facility for Rare Isotope Beam, Michigan State University, USA
11.	7.30pm – 8.00pm	Doppler-Shift lifetime measurements with TIP and TIGRESS at TRIUMF	Krzysztof Starosta, Simon Fraser University, Canada

**Date: 2<sup>nd</sup> February 2022**

Technical Session – IV (25+5)			Chair: Dr. Deepak Biswas
No.	Time (IST)	Title	Speaker
12.	2.00pm - 2.30pm	Developments in the electronic technique of gamma-gamma fast-timing spectroscopy for measurements on nuclear level lifetime	Jean-Marc Regis, Institut fur Kernphysik, Koln, Germany
13.	2.30pm – 3.00pm	Overview of gamma-gamma fast-timing measurements using the ROSPHERE array	Sorin Pascu, Horia Hulubei National Institute for R&D in Physics and Nuclear Engineering (IFIN-HH), Romania
14.	3.00pm – 3.30pm	FATIMA at GSI, Germany with Radioactive Ion Beams	Akashrup Banerjee, Facility for Rare Isotope Beam, Michigan State University, USA
15.	3.30pm – 4.00pm	VENTURE: The gamma - gamma fast timing array for Nuclear Structure Studies at VECC, Kolkata	Shaikh Safikul Alam, Government General Degree College, Chapra, West Bengal
	4.00pm – 4.20pm	Short Break	
Technical Session – V (25+5)			Chair: Dr. Satyen Das
16.	4.20pm – 4.50pm	The search for «missing links» of nuclear quadrupole moments – Where we stand	Heinz Haas, Conseil Européen pour la Recherche Nucléaire , Geneva
17.	4.50pm – 5.20pm	Measurement of electromagnetic moments in high spin isomers -- recent results in La	Surendra Nath Mishra, Indian Institute of Science Education and Research, Berhampur, India
Technical Session – VI (15+5)			Chair: Dr. Polash Banerjee
18.	5.20pm – 5.40pm	Nuclear Structure Studies through Static Nuclear Moment Measurements	Jasmeet Kaur, Guru Nanak Dev University , Amritsar
19.	5.40pm – 6.00pm	Exploring exotic structure in nuclei through gamma-gamma fast timing measurements at VECC, Kolkata	Devesh Kumar, Variable Energy Cyclotron Centre, Kolkata
20.	6.00pm – 6.20pm	The evolution of B(E3) in Lanthanum isotopes	Md Sazedur Rahaman Laskar, Tata Institute of Fundamental Research, Mumbai
21.	6.20pm – 6.40pm	Lifetime measurements in Pt and Tl isotopes populated via multi-nucleon transfer reactions	S. Gholam Wahid, University of Massachusetts Lowell, USA
	6.40pm – 7.00pm	Short Break	
Technical Session – VII (25+5)			Chair: Dr. Alok Chakraborti
22.	7.00pm – 7.30pm	Search for Triaxial Deformation using Coulomb Excitation and $\beta$ -Decay	James Mitch Allmond, Oak Ridge National Laboratory , USA
23.	7.30pm – 8.00pm	$\beta$ -delayed neutron emission of exotic nuclei - update or upgrade?	Robert Grzywacz, University of Tennessee, USA

**Date: 3<sup>rd</sup> February 2022**

Technical Session –VIII (25+5)			Chair: Dr. A. K. Jain
No.	Time (IST)	Title	Speaker
24.	2.00pm - 2.30pm	Current shell-model progress in the investigation of $^{132}\text{Sn}$ and $^{208}\text{Pb}$ regions	Houda Naidja, Université Constantine, Algeria
25.	2.30pm – 3.00pm	Shell model studies in nuclear beta decay	Praveen C. Srivastava, Indian Institute of Technology, Roorkee, India
Technical Session –IX (25+5)			Chair: Dr. Saila Bhattacharya
26.	3.00pm – 3.30pm	Gamma-ray transition strength measurements to address a puzzling anomaly in $^{22}\text{Na}$ beta decay	Smarajit Triambak, University of the Western Cape, South Africa
27.	3.30pm – 4.00pm	DURGA: A novel facility in India to study capture gamma, fission fragment and decay spectroscopy	Somsundar Mukhopadhyay, BARC, Mumbai, India
	4.00pm – 4.20pm	Short Break	
Technical Session –X (15+5)			Chair: Dr. Ambar Chatterjee
28.	4.20pm – 4.40pm	Penning Trap and its application in nuclear structure studies	Arindam Kumar Sikdar, VECC, Kolkata
29.	4.40pm – 5.00pm	Nuclear Structure studies using $\beta$ -decay with LEPS	Arunabha Saha, ICFAI University, Tripura
30.	5.00pm – 5.20pm	New lifetime measurements for the $2_1^+$ level in $^{112,120}\text{Sn}$ by the Doppler-shift attenuation method	Ananya Kundu, Tata Institute of Fundamental Research, Mumbai, India
31.	5.20pm – 5.40pm	Lifetime measurement of astrophysically important states using Doppler technique	Sathi Sharma, Mody University, India
Students' Session (25+5)			Chair: Dr. Santanu Pal
32.	5.40pm – 6.10pm	How to make a bad presentation	Sandeep. S. Ghugre, UGC-DAE-CSR, Kolkata
	6.10pm – 6.30pm	Short Break	
Discussion Session			
33.	6.30pm – 7.30pm	Panel Discussion	Sukalyan Chattopadhyay, Indranil Mazumdar, Tumpa Bhattacharjee, Rajarshi Raut
Concluding Session			
34.	7.30pm – 8.00pm	Summary Talk	Sukalyan Chattopadhyay