

Pre-symposium Orientation Program on 30th November, 2022

9:00 -9:15 (hrs)	Introduction		
9:15 -10:45	Session-1 (Chairman: Prof. Ganesh Ch. Wary)		
9:15-10:00	Maitreyee S Sarkar: <i>Introduction to nuclear astrophysics</i>		
10:00-10:45	Rajeev Mehta: <i>Introductory talk on DC & RF accelerators and glimpse of national accelerator program</i>		
10:45-11:15	Tea break		
11:15-13:00	Session-2 (Chairman: Prof. Vivek Datar)		
11:15-11:45	Satyanjan Santra : <i>Nuclear astrophysics: current and future plan in India</i>		
11:45-12:00	Nabajyoti Pandit : <i>Design of differentially pumping system for jet targets</i>		
12:00-12:15	Jiban Jyoti Das : <i>Summary of Lab sessions</i>		
12:15-13:00	Prof. Daniel Bemmerer : <i>Understanding stars through laboratory experiments</i>		
13:00-14:00	Lunch		
Laboratory Sessions (Choice[§]: Lab A or Lab B&C)			
14:00-16:00	Session-III (Parallel sessions)		
	Lab A* (Group-1)	Lab B (Group-2)	Lab C (Group-3)
	Chairman: Dr A K Sinha	Chairman: Dr. L M Pant	Chairman: Dr Kushal Kalita
14:00-14:30	N. Madhavan <i>First order design and optics of recoil mass spectrometers for nuclear astrophysics-I</i>	S. Ghugre <i>Photon detection & digital signal processing for nuclear astrophysics</i>	Akhil Jhingan <i>Advanced charged particle detection system & electronics for nuclear astrophysics</i>
14:30-15:00	<i>Hands on: Computer codes installation & demo</i>	<i>Hands on: Scintillator system</i> Cotton: Anup Nath ICFAI,Tripura: Aibanjop	Product demo <i>Detectors, electronics, vacuum system</i>
15:00-16:00	Lab: Gonika	Pyngrope, Arunabha Saha Donbosco, Guwahati:Yajnya Sapkota	Dr Kushal Kalita and group, Dr. Neelanjan Buzarbaruah <i>Si Detector and electronics</i>
16:00-16:30	Tea Break		
16:30-18:30	Session-IV (Parallel sessions)		
	Lab A* (Group-1)	Lab B (Group-3)	Lab C (Group-2)
	Chairman: Dr. A. K. Sinha	Chairman: Dr. L. M. Pant	Chairman: Dr. Kushal Kalita
16:30-17:00	Jiban Jyoti Das <i>Lattices: Building Blocks of Ion optical system</i>	Shashwati Sen <i>Photon detection & digital signal processing for nuclear astrophysics-II</i>	Akhil Jhingan <i>Advanced charged particle detection system & electronics for nuclear astrophysics</i>
17:00-17:30	<i>Assignments and solutions</i>	<i>Hands on: Scintillator system</i> Cotton: Anup Nath ICFAI,Tripura: Aibanjop	Product demo <i>Detectors, electronics, vacuum system</i>
17:30-18:30	Bhargab Boruah, Rasna Baruah (Anchor: N Madhavan, Gonika)	Pyngrope, Arunabha Saha Donbosco, Guwahati:Yajnya Sapkota	Dr Kushal Kalita and group, Dr. Neelanjan Buzarbaruah <i>Si Detector and electronics</i>

Note:

[§]For Lab sessions, participants will be divided into three groups. Group-2 and -3 will be able attend both Lab B & C courses in two sessions by interchanging the labs. However, Group-1 participants will be able attend only Lab-A courses.

* Pre-requisite for Lab-A participants: Should have experience with charge particle and photon detectors, preferably the second or higher years of PhD.