

08:30 - 09:30

Registration and Breakfast

## Session I: Inauguration

09:30 - 09:45

ARIES Director

Welcome adress

09:45 - 10:00

YAM chair

Program details

10:00 - 11:00

Prof. K.P. Singh

Recurrent Novae

11:00 - 11:45

Tea and Poster Session

## Session II

## Session Chair : Vibhore Negi

11:45-12:00

AKHIL JAINI

Design and Development of a Digital Multimirror Device (DMD) based Multi Object Spectrograph for INSIST

12:00-12:15

MD RASHID

Investigation of reliability of spectral index recovered by different methods from simulated low frequency uGMRT data

12:15-12:30

AJAY KUMAR

Implementing periodic RFI mitigation for CHIME slow pulsar search backend

12:30-12:45

NAVAL KISHOR BHADARI

Unravelling the presence of two expanding PDR shells around massive stars in S305 HII region

12:45-13:00

SUSMITA BARMAN

A Study of Photoionized Gas in the Two HII Regions of the N44 Superbubble complex in the LMC Using MUSE Observations

13:00 - 14:00

Lunch

## Session III

## Session Chair: Harsh Kumar

14:00-14:15

JYOTI

Discovery of an diffuse star-forming galaxy using UVIT-Astrosat

14:15-14:30

SAYAK DUTTA

Mapping the distribution of neutral hydrogen around low redshift galaxies

14:30-14:45

AAYUSHI VERMA

Photometric Study of the Open Cluster Kronberger 55

14:45-15:15

e-Poster session

15:15 - 16:00

Tea and Poster Session

## Session IV

## Session Chair : Arpit Shrivastav

16:00-16:15

JITENDRA KUMAR

Strong gravitational lensing by regular electrically charged spacetimes

16:15-16:30

MUKESH KUMAR SINGH

Associating fast radio bursts with compact binary mergers via gravitational lensing

16:30-16:45

RAVI KUMAR SHARMA

Signatures of Light Massive Relics on nonlinear structure formation

16:45-17:15

e-Poster session

18:30-19:30

PROF. JEAN SURDEJ

From the pinhole camera to the 4m International Liquid Mirror Telescope

08:30 - 09:30			Breakfast		
<b>Session I</b>			<b>Session Chair : Amar Aryan</b>		
09:30-09:45	RAHUL GUPTA	Probing into emission mechanisms of GRBs using time-resolved spectra and polarization studies			
09:45-10:00	ANKUR GHOSH	Low-frequency view of long duration GRB afterglows			
10:00-10:15	RISHABH SINGH TEJA	Panchromatic observations and modeling of two Type II supernovae in M61: Similar origins yet different fates.			
10:15-10:30	GEETHU PRABHAKAR	Wideband spectro-temporal analysis of MAXI J1820+070 during 2018 outbursts			
10:30-10:45	MR. BIRENDRA CHHOTARAY	Multi-wavelength study of Be/X-ray binary 1A 0535+262 during its 2020 giant outburst			
10:45 - 11:30			Tea and Poster Session		
<b>Session II</b>			<b>Session Chair : Dimple</b>		
11:30-11:45	SHAILENDRA SINGH	Gravitational wave signal from the phase transition in neutron star.			
11:45-12:00	SRASHTI GOYAL	Probing beyond-GR gravitational wave birefringence with LIGO-Virgo-Kagra data			
12:00-12:15	SHASHANK SHEKHAR PANDEY	Effect of inhomogeneities on the amplitude of Gravitational Waves			
12:15-12:30	SOURADEEP PAL	Swarm-intelligent search for gravitational waves from compact binary coalescences			
12:30-12:45	GAURAV WARATKAR	Sifting for electromagnetic counterparts to LIGO-Virgo-KAGRA Gravitational Wave triggers using AstroSat-CZTI			
13:00 - 14:00			Lunch		
<b>Session III</b>			<b>Session Chair : Vivek Kumar Jha</b>		
14:00-14:15	PARTHA PRATIM DEKA	An unbiased view of cold atomic gas associated with radio-loud AGNs up-to $z \sim 2$ using MALS.			
14:15-14:30	VINIT DHIMAN	Multi-band Optical Variability of the TeV Blazar PG 1553+113 in 2019			
14:30-14:45	AVINANDA CHAKRABORTY	Characterizing the Effect of Quasar Feedback in X-ray and Sunyaev-Zel'dovich Signals from Galaxy Clusters			
14:45-15:15	<b>e-Poster Session</b>				
15:15 - 16:00			Tea and Poster Session		
<b>Session IV</b>			<b>Session Chair : Gurpreet Singh</b>		
16:00-16:15	ANJU PANTHI	UV Study of the open cluster NGC 2506 using ASTROSAT			
16:15-16:30	NITESH KUMAR	Generation of RR Lyrae light curves within parameter space of a grid of theoretical models using Artificial Neural Networks			
16:30-16:45	AKANKSHA KHANDELWAL	Detection of an inflated hot Jupiter around an evolved late F type star TOI-1789			
16:45-17:15	<b>e-Poster Session</b>				

08:30 - 09:30

Breakfast

## Session I

Session Chair : Raj Kishor Joshi

09:30-10:30

PROF. PATRICK DASGUPTA

Black hole menagerie - from primordial to supermassive

10:30-10:45

P.C LALREMRUATI

Role of stellar astrophysics in testing general relativity near the Galactic Centre black hole Sgr A\*

10:45-11:00

AMIT KUMAR

Environmental effects on dark matter distribution around satellite galaxies in massive galaxy clusters

11:00-11:15

SEMIN XAVIER

An exact model for evaporating black holes in cosmological space-time.

11:15-11:30

YASHI TIWARI

Understanding large scale CMB anomalies with the generalized non-minimal derivative coupling during inflation

11:30 - 12:00

Tea &amp; Poster Session

## Session II

Session Chair : Raj Kishor Joshi

12:00-12:15

SAMIK MITRA

Global structure of general relativistic magneto-hydrodynamics accretion flows around black holes

12:15-12:30

SRIYASRITI ACHARYA

Impact of instability-driven shocks on the multi-wavelength nature of AGN Jets through numerical simulations

12:30-12:45

SUBHADIP BOURI

Bounds on ultralight bosons from the Event Horizon Telescope observation of Sgr A

12:45-13:00

SUSHMITA AGARWAL

State change due to birth of narrow jet in BL lac jets

13:00 - 14:00

Lunch

## Session III

Session Chair : Nitin Vashishth

14:00-14:15

UPASNA BAWEJA

Coronal Magnetic field estimation using Bayesian Inference

14:15-14:30

PAWAN KUMAR

Supercriticality of the Dynamo Limits the Memory of the Polar Field to One Cycle

14:30-14:45

BIKRAM KESHARI PRADHAN

f-mode oscillations in neutron stars : role of Neutron star composition and impact on the gravitational waveform

14:45-15:00

KAUSHIK PAUL

Spin effects in eccentric higher modes from inspiralling compact binaries up to 2PN order

15:00-15:30

e-Poster Session

15:30 - 16:00

Tea &amp; Poster Session

## Session IV : Outreach/Other talks

Session Chair : Vivek Kumar Jha

16:00-16:30

Prof. Dibyendu Nandi

Activities of the ASI-POEC

16:30-17:00

Dr. Anand Deshpande  
(Founder, Chairman and Managing  
Director of Persistent Systems)

Discussion with YAM participants

17:00-17:30

e-Poster Session

Saturday		Day-4		November 12, 2022	
08:30 - 09:30		Breakfast			
Session I		Session Chair : Vishal Uperdran			
09:30-10:30	Prof. MAHESWAR GOPINATHAN	Stellar cradles in solar neighbourhood			
10:30-10:45	SOUMYARANJAN KHUNTIA	Evolution of the internal thermodynamic state of Coronal Mass Ejections			
10:45-11:00	URMI DOSHI	Multi-wavelength analysis of Coronal Mass Ejections and Associated Phenomena			
11:00-11:15	CHARITA PANT	Geoeffectiveness of DH-CMEs for solar cycle 24			
11:15-11:30	PRATEEK MAYANK	SWASTi- Space Weather Adaptive SimilaTion framework			
10:45 - 11:30		Tea & Poster Session			
Session II		Session Chair : Dimple			
12:00-12:15	Chrispin Karthick	Outreach Activities at IIA			
12:15-12:30	Virendra Yadav	Outreach Activities at ARIES			
12:30-12:45	Atharva Pathak	Outreach Activities at IUCAA			
12:45-13:00	Vishal Upendran	An introduction to CosmicVarta			
13:00-14:00		Lunch			
Session III		Session Chair : Amar Aryan			
14:00-14:15	GOURAV BANERJEE	Understanding the disc evolution of classical Be stars using multi-epoch optical spectroscopy			
14:15-14:30	GURPREET SINGH	An X-Ray Study of Coronally Connected Active Eclipsing Binary, XY UMa			
14:30-14:45	HIMANSHU TYAGI	Evolution of Silicate Dust during Star and Planet formation			
14:45-15:00	ANIRBAN DUTTA	Broadband X-ray study of two unique magnetic cataclysmic variables			
15:00-15:30		Tea & Poster Session			
Session IV : Discussion					
15:30-16:00		Concluding Remarks & Future Prospects			
16:00-17:00		Discussion with participants Next YAM, feedback, comments from ASI office bearers			
Sunday		Day-5		November 13, 2022	
08:30 - 09:30		Breakfast			
10:00		Visit To Devasthal			