Program for the Workshop WS5: Planning a more robust follow-up of transient astronomical sources from India

Date: 31 January 2024 (ASI 2024)

Venue: LH 4 (F0 11), Physical Sciences Building, IISc, Bengaluru.

Time	Talk – Topic (Theme)	Speaker
9:30 – 9:40	**Welcome**	
9:40 – 11:00 (Session – I) **Context:** ***The presenters are expected to summarize the current state of involvement in the multi-wavelength follow-up programs by the Indian community, the niche impact science areas, and the most suitable existing instrumentation for respective areas. (10 min talk + 5 min Discussions)***		
9:40 – 9:55	AGN Variability – success and shortcomings (if any) in integrating Indian facilities	Debbijoy Bhattacharya MAHE / MCNS
9:55 – 10:10	X-ray Binary / CV – success and shortcomings (if any) in integrating Indian facilities	Samir Mandal IIST
10:10 – 10:25	Supernova and GRB science – success and shortcomings (if any) in integrating Indian facilities	Kuntal Misra ARIES
10:25 – 10:40	GW follow-ups - success and shortcomings (if any) in integrating Indian facilities	L. Resmi IIST
10:40 – 10:55	Importance of immediate follow-ups, present worldwide strategy and the future plan in the Indian context.	Rupak Roy MAHE / MCNS
11:00 – 11:30	**Coffee Break**	
11:30 – 13:00 (Session – II) **Context:** ***The presenters are expected to summarize the current state of follow-up programs being taken up by the observatory, the strategy of trigger, data acquisition and handling, data dissemination, scope for improvement to have an efficient transient follow-up system.*** **(10 min talk + 2 min discussion)**		
11:30 – 11:42	ARIES facilities and ILMT as a sky-survey telescope	Brijesh Kumar ARIES
11:42 – 11:54	IIA – optical facilities	D. K. Sahu IIA
11:54 – 12:06	PRL – ground-based facilities	Shashikiran Ganesh PRL
12:06 – 12:18	GMRT	Ishwara chandra NCRA
12:18 –12:30	MACE	Subir Bhattacharya BARC
12:30 – 12:40	New optical telescope at Central Univ. Of Himachal Pradesh and transient science	Hum Chand Central Univ. Of Himachal Pradesh
12:40 – 12:52	ASTROSAT and Daksha – transient study capabilities	Santosh Vadawale PRL
12:52 – 13:00	Future UV-space program	Mudit Shrivastava PRL
13:00 – 14:00	**Lunch Break**	
14:00 – 15:30 (session – III) **Context:** ***To demonstrate the importance of web-based interfaces for information exchange during the future transient programs and application of such facilities for Indian observatories. Strategy to integrate even small telescopes in this network – problem and solutions***		

14:00 – 14:20	Integrating small (<1 m diameter) and amateur telescopes of India in future transient program	Sudhanshu Barway IIA
14:20 – 14:40	Adaptation of some existing tools and status of the early phase of the development of a similar system suited for Indian observatories.	Rupak Roy MAHE / MCNS
14:40 – 15:30 (session - IV) **Panel Discussions**		
14:40 –14:45	Summary of the plans for future transient programs in India.	Kuntal Misra ARIES
14:45 – 15:30	• Comments from panelists on summary and future steps. • Issues with photometric follow-up and calibration in amateur telescopes. • Framework to conduct yearly conferences and capacity-building workshops. • Dedicated telescopes and instrumentation for transient science in the future. • Additional suggestions to build up a common platform to exchange information regarding the follow-up programs using Indian facilities.	**Panelist:** *Annapurni Subramanium (IIA), G. C. Anupama (IIA), Shashi Kiran Ganesh (PRL), Brijesh Kumar (ARIES), Gulab Dewangan (IUCAA)*
15:30 – 16:00	**Coffee Break**	