## **META-2022**

# Wednesday, September 14, 2022

#### Session: Instrumentation Projects at IIA - Auditorium (11:30 AM - 1:10 PM)

-Conveners: Mahesh Panangattukara; Tarun Bangia

time	[id] title	presenter
11:30 AM	[57] Mechanical Design Aspects of INSIST Project	Dr S, Nagabhushana
11:50 AM	[58] NLST Project	Dr B, Ravindra
12:10 PM	[59] SCALES Project	Dr BANYAL, Ravinder K.
12:30 PM	[60] Primary Mirror Control Systems (M1CS) of the Thirty Meter Telescope (TMT) Project	Dr DESHMUKH, Prasanna
12:50 PM	[61] Conceptual design of M2/M3 Coating Plant for TMT	Dr GOPINATHAN, Maheswar

#### Session: Antenna and RF, Digital Signal Processing & CCD Controllers - Auditorium (2:00 PM - 3:30 PM)

-Conveners: Kumar T.S.; Prasanna Deshmukh

time	[id] title	presenter
2:00 PM	[62] Navigation Systems for Aero space Applications	PRASAD, Shiv
2:30 PM	[63] Overview of GMRT Antenna Feed Upgrade : Current and Future Works	BANDARI, HANUMANTH RAO
2:45 PM	[64] FPGA Accelerated Cross Correlation of Digital Images: Application to Solar Adaptive Optics	DAS, Soham
3:00 PM	[65] Recent Updates from the Expanded GMRT Aperture Array Beamformer Development	DIXIT, Bela
3:15 PM	[66] Characterization of a deep-depletion 4K x 4K CCD Detector System designed for ADFOSC	DIMPLE, Dimple

### Session: Optical Engineering - Auditorium (4:00 PM - 6:00 PM)

-Conveners: Sriram S; Krishna Reddy

time	[id] title	presenter
4:00 PM	[67] Optics Fabrication	KRISHNA, Rama
4:30 PM	[68] Aluminizing the Primary Mirrors of Telescopes in ARIES	REDDY, Krishna
4:45 PM	[69] The conceptual design of high-resolution optical spectrograph for TMT	HASAN, Amirul
5:00 PM	[70] Optomechanical design and analysis of SING spectrograph	GOPALAKRISHNAN, Binukumar
5:15 PM	[71] Optical design of thermal infrared imager for the SCALES on Keck	HASAN, Amirul
5:30 PM	[72] Assessing the Performance of a Digital Micromirror Device (DMD) based Multi-Object Spectrograph (MOS) for the Indian Spectroscopic and Imaging Space Telescope (INSIST)	HOODATI, ANWESHA
5:45 PM	[73] Full Stokes Polarimeter for Characterization of Retarders	DVS, Phanindra

# Thursday, September 15, 2022

#### Session: Mechanical Systems and Emerging Manufacturing Technology - Auditorium (11:00 AM - 1:00 PM)

#### -Conveners: Kathiravan S; Nagabhushana S

time	[id] title	presenter
11:00 AM	[77] Porous Nano Materials for Advanced Applications	Prof. HEBBAR, Gurumoorthi
11:30 AM	[78] Upgradation in the Filter slide motion mechanism for 1.3m DFOT	BANGIA, Tarun
11:45 AM	[79] Preliminary Design of Imager Filter Wheel Mechanism (IFWM) for Keck Observatory SCALES Instrument	VARSHNEY, Hari Mohan
12:00 PM	[80] Structural Design and Finite Element Analysis of Wide Field Optical Spectrograph (WFOS)	PRAKASH, AJIN
12:15 PM	[81] Mechanical Engineering & modern Observational Science - with emerging Manufacturing Technology	CHAKRABORTY, PRADIP
12:30 PM	[82] Design & Development of Grating Exchanger (GRX) for TMT-Wide Field Optical Spectrograph	VARSHNEY, Hari Mohan
12:45 PM	[83] Balloon-borne Payload Module: Collection of Micrometeorite Dust at High Altitudes in Earth's Atmosphere	ARORA, Diksha

#### Session: Electrical Systems - Auditorium (2:00 PM - 3:30 PM)

#### -Conveners: Dorje Angchuk; Prabhu T

time	[id] title	presenter
2:00 PM	[84] Best Grounding practices	C, Prabhakar
2:30 PM	[85] Astrometric and photometric standard candidates for the upcoming 4-m ILMT survey	DUKIYA, Naveen
2:45 PM	[86] 1.3m Telescope Current Status and Future Up-gradation Plans	JAISWAR, Mukeshkumar
3:00 PM	[87] A portable, low-cost multispectral system for monitoring night sky brightness over the astronomical sites	KUMAR, Ashish
3:15 PM	[88] Upgradation of integral auto guider unit subsystem of the 3.6 m DOT	T.S., Kumar

# <u>Session: Observatory Control System and Software, RFI & EMI/EMC Mitigation & High Performance Computing</u> - Auditorium (4:00 PM - 5:15 PM)

#### -Conveners: Amit Kumar; Phanindra DVS

time	[id] title	presenter
4:00 PM	[89] The 50cm Robotic Telescope: Control System Upgrade and Automation	STANZIN, Tsewang
4:15 PM	[90] RF over fiber based distributed RFI monitoring system	RAI, Sanjeet
4:30 PM	[91] Real-time Broadband RFI Filtering System for uGMRT: Overview of the Released System and Future Plans	BUCH, Kaushal
4:45 PM	[92] Multi-Element Correlator & Beam former using Open CL on FPGA Accelerator Card	HOMBAL, Raghuttam
5:00 PM	[93] Electronics subsystem development of SING spectrograph payload	CHANDRA, Bharath

## Session: Engineer's Day Talk & Cultural Program - Auditorium (6:00 PM - 8:15 PM)

time	[id] title	presenter
6:00 PM	[94] Felicitation to Mr.Dorje Angchuk for Honorary Member of the IAU	
6:05 PM	[95] Engineer's Day Talk	S, Somanath
6:45 PM	[96] "RAAG-HARMONY" by Ateetam and Musical Programme by IIA Family	