

# 11<sup>th</sup> Radio Astronomy Winter School schedule: Dec 14 – 24, 2018

Inauguration at NCRA Lecture Hall on Dec 14 at 09.30 AM

	08.00-09.50	10.15 - 11.15	11.45 - 12.45	14.30 - 18.00	21.00-24.00
14 <sup>th</sup> (Fri)		Radio Astronomy (JNC)	ISM (SR)	<u>15.00-16.00</u>   <u>16.30-17.30</u> Basics of Radio emission-I (PB)   Spherical Co-ordinate System (BCJ)	--
15 <sup>th</sup> (Sat)	09.00 AM onwards -- Trip to GMRT (C3 Ant. visit +Introductory Interferometry +data)				
16 <sup>th</sup> (Sun)	Return from GMRT after Breakfast				
17 <sup>th</sup> (Mon)	E1(Sun)—G1 (NG+JR)	Error analysis (SMo)	Sun (DO)	E2 (Noise) -G2 (JB+JM) E3 (Elec.) -G3 (BCJ+JR)	E4 (HI) -G4 (SR+RT) E4' (HI) -G5 (JB+JM+AM)
18 <sup>th</sup> (Tue)	E1 (Sun)—G2 (NG+JR)	Basics of Radio emission-II (PB)	Radio Transients (PC)	E2 (Noise) -G3 (JB+JM) E3 (Elec.) -G4 (BCJ+JR)	E4 (HI) -G1 (SR+RT)
19 <sup>th</sup> (Wed)	E1(Sun)—G3 (NG+JR)	AGN (IC)	Galaxy Clusters (JB)	E2 (Noise) -G4 (JB+JM) E3 (Elec.) -G5 (BCJ+JR)	E4' (HI) -G2 (JB+JM+AM)
20 <sup>th</sup> (Thu)	E1(Sun)—G4 (NG+JR)	Pulsars (DM)	High energy Astrophysics (RM)	E2 (Noise) -G5 (JB+JM) E3 (Elec.) -G1 (BCJ+JR)	E4 (HI) -G3 (SR+RT)
21 <sup>st</sup> (Fri)	E1(Sun)—G5 (NG+JR)	General Theory of Relativity (SMi)	Large Telescopes (YW)	E2 (Noise) -G2 (JB+JM) E3 (Elec.) -G1 (BCJ+JR)	BANQUET
22 <sup>nd</sup> (Sat)	Demonstration : Raman Effect [9 -12 AM] (IUCAA RPL)				
24 <sup>th</sup> (Mon)	RAWSC Presentations (09.30-13.00)			14.15-16.00 Quiz	16.30-17.30 Wrap-up session

E1 (Sun)	Expt 1	Sun observations with the 4m telescope – Finding pointing offsets and beam width of the antenna (Venue: NCRA East Campus )
E2 (Noise)	Expt 2	Johnson (thermal) noise across resistors (IUCAA RPL)
E3 (Elec.)	Expt 3	Characterising Superheterodyne Radio Receiver (NCRA RPL)
E4 (HI)	Expt 4	Characterising HI emission from Galaxy (NCRA RPL)
E4' (HI)	Expt 4	Characterising HI emission from Galaxy (IUCAA RPL)
<b>Short name</b>	<b>Name of the Lecturers</b>	<b>Topics</b>
JNC	Jayaram N Chengalur	Radio Astronomy
SR	Subhashis Roy	Interstellar Medium
PB	Prasanta Bera	Basics of Radio Emission-I, II
BCJ	Bhal Chandra Joshi	Spherical Co-ordinate System
SMo	Surhud More	Error Analysis
DO	Divya Oberoi	Sun
PC	Poonam Chandra	Radio Transients
IC	Ishwar Chandra	Active Galactic Nuclei
JB	Joydeep Bagchi	Galaxy Clusters and Large Scale Structures
DM	Dipanjan Mitra	Pulsars
RM	Ranjeev Misra	High energy Astronomy
SMi	Sanjit Mitra	General theory of Relativity
YW	Yogesh Wadadekar	Upcoming Large Telescopes
		Note: G1, G2, G3, G4, G5 are groups of participants for the experiments.

**For RAWSC-2018 Experiment sessions:**

RT: Rupesh Tagad

JR: Jayashree Roy

JM: Jameer Manur

AM: Ashish Mhaske

SR : Subhashis Roy

NG : Neeraj Gupta

BCJ: Bhal Chandra Joshi

JB : Joydeep Bagchi

**Venue for Lectures: NCRA Lecture Hall**

**Food at NCRA Canteen**

Breakfast: 8.00-9.00 AM.

(By 8.15 AM for the group with Sun expt)

Tea breaks 11.15 -11.45, 16.00-16.30.

Lunch: 13.30-14.00

Dinner: 20.00-21.00