

# Advances in Astroparticle Physics and Cosmology (AAPCOS-2018)

6 March, 2018

8:30- 9:30		Registration
9:30- 9:45		Inauguration
<b>Session-I</b>	<b>Chairperson</b>	<b>Alak Ray</b>
9:45- 10:30	Yashwant Gupta	Astrophysics at Low Radio Frequencies : from the uGMRT to the SKA
10:30-11:15	Dipankar Bhattacharyya	Polarimetry of Gamma Ray Bursts
11:15-11:30	<b>High Tea</b>	
<b>Session-II</b>	<b>Chairperson</b>	<b>Pijushpani Bhattacharjee</b>
11:30- 12:15	Pasquale D. Serpico	Entering the Cosmic Ray Precision Era
12:15-13:00	Md. Rameez	IceCube:Neutrinos from the heavens and hell
13:00-14:15	<b>Lunch</b>	
<b>Session III</b>	<b>Chairperson</b>	<b>Naba Mondal</b>
15:00-15:45	Biswarup Mukhopadhyay	Some particle dark matter scenarios beyond the beaten track: constraints and terrestrial detection
15:45-16:05	Sukannya Bhattacharya	Constraining Warm Inflation with CMB data
16:05-16:20	<b>Tea Break</b>	
<b>Session IV</b>	<b>Chairperson</b>	<b>Debasish Majumdar</b>
16:20-16:50	Reetanjali Moharana	Multi-messenger study of the high energy IceCube neutrino events
16:50-17:20	Anatoli Fedynitch	The quest for the sources of ultra-high energy cosmic rays and neutrinos
17:20-17:50	Nayantara Gupta	Extended jets of quasars, multiwavelength modelling of kiloparsec jet emission
17:50-18:20	Indranil Chattopadhyay	Accretion onto a black hole

7 March, 2018

<b>Session-I</b>	<b>Chairperson</b>	<b>Debades Bandopadhyay</b>
9:30- 10:15	Stefan Schramm	Neutron Star Matter and the Equation of State
10:15-11:00	Bhal Chandra Joshi	Precision pulsar timing with the ORT and the GMRT and its applications in pulsar astrophysics
11:00-11:20	<b>Tea</b>	
11:20-12:05	Bronek Rudak	The many faces of Pulsars
12:05-12:35	Dipanjan Mitra	Relativistic charged solitons: A candidate for solving the problem of coherent radio emission from pulsars
12:35- 12:55	Rana Nandi	Simulation of the neutron star crust
12:55- 13:15	Avishek Basu	A multiwavelength study of Crab Pulsar
13:15-14:15	<b>Lunch</b>	
<b>Session-II</b>	<b>Chairperson</b>	<b>Indranil Chattopadhyay</b>
14:15-15:00	Helene Sol	AGNs at Very High Energies
15:00-15:30	Gulab Chand Dewangan	AGNs with ASTROSAT
16:15-17:30	<b>Govind Swarup</b>	<b>53<sup>rd</sup> Meghnad Saha Memorial Lecture :</b> Radio Waves and the Universe: Big Bang to Black Holes

8 March, 2018

<b>Session-I</b>	<b>Chairperson</b>	<b>Dipanjan Mitra</b>
9:30-10:15	Kouichi Hirotani	Lighting black holes as unidentified TeV sources
10:15-11:00	Stefan Schlenstedt	Gamma-ray Astronomy in preparation of the Cherenkov Telescope Array
11:00-11:15	<b>Tea</b>	
<b>Session-II</b>	<b>Chairperson</b>	<b>Bhal Chandra Joshi</b>
11:15-11:45	Sudip Bhattacharyya	Do gravitational waves limit the spin rates of millisecond pulsar ?
11:45-12:15	K.G.Arun	Binary neutron star merger GW170817 and Fundamental Physics
12:15-12:35	Prasanta Char	Effect of superfluidity in neutron star in two-fluid scenario
12:35-12:55	Sidhartha Bhattacharyya	On Modelling the Fast Radio Burst Population and event rate predictions
12:55-14:15	<b>Lunch</b>	
<b>Session-III</b>	<b>Chairperson</b>	<b>Satyajit Saha</b>
14:15-15:00	Subhendra Mohanty	What we learn about dark matter and dark energy from LSS and CMB
15:00-15:30	Ruslan Podviianiuk	XENON and MOSCAB dark matter search experiments
15:30-16:00	Vikram Rantala	Dark matter self-interactions and cosmic reionization
16:00-16:20	Mala Das	Recent activities at SINP for dark matter direct search experiment
16:20-16:40	<b>Tea Break</b>	
<b>Session-IV</b>	<b>Chairperson</b>	<b>Sudip Bhattacharyya</b>
16:40-17:10	Alak Ray	Supernovae and distance scale in astrophysics
17:10-17:40	Varsha Chitnis	VHE Gamma Ray Astronomy Using HAGAR Telescope Array
17:40-18:00	Raj Prince	Long-term study of the Light curve of PKS 1510-089 in GeV energies
18:00-18:20	Srimanta Banerjee	Tilted thin accretion disk around a spinning black hole
19:30 -		<b>CONFERENCE DINNER</b>

9 March, 2018

<b>Session-I</b>	<b>Chairperson</b>	<b>Amit Ghosh</b>
9:30- 10:15	Sukanta Bose	Constraining the neutron star equation of state with gravitational-wave observations
10:15-11:00	Matthias Hanauske	Neutron star mergers in the context of the hadron-quark phase transition
11:00-11:15	<b>Tea</b>	
<b>Session-II</b>	<b>Chairperson</b>	<b>Ambar Ghosal</b>
11:15-12:00	Biswajit Paul	Prospects of neutron star studies with an X-ray Polarimeter (POLIX) on a small satellite mission
12:00-12:30	Nachiketa Chakraborty	Multi-Observable Transient Astrophysics
12:30-13:00	Subir Bhattacharyya	Timing studies of gamma-ray bursts
13:00-14:15	<b>Lunch</b>	
<b>Session-III</b>	<b>Chairperson</b>	<b>Koushik Dutta</b>
14:15-15:00	Anjan Ananda Sen	The price of shifting the Hubble constant and evidence (or no evidence) for dark energy evolution
15:00-15:30	Debasish Borah	Singlet fermion dark matter and radiative neutrino mass with gauged B-L symmetry
15:30-16:00	Sovan Chakraborty	Supernova Neutrinos:flavor conversion independent of their mass
16:00-16:20	Poonam Mehta	Hunt for CP violation at long baseline neutrino experiments
16:20-16:40	Mohammed Rameez	Dipoles in the angular distribution of galaxies in radio and infrared surveys
16:40-	<b>Conclusions &amp; Tea</b>	