

**Chennai Symposium on Gravitation and Cosmology**  
**Indian Institute of Technology Madras**  
**January 22-24, 2020**

**Schedule**

**Wednesday, January 22**

Time	Speaker	Title
08:30-09:00	Registration	
09:00-09:15	Inauguration	
09:15-10:15	Sayan Kar	Shadows, echoes and memory
10:15-10:45	Coffee break	
10:45-11:45	Sudipta Sarkar	Going beyond Einstein: Theoretical and observational constraints
11:45-12:15	Anand Sengupta	Unveiling the spectrum of inspiraling binary black holes
12:15-12:45	Debottam Nandi	Einstein or Jordan: Seeking answers from the reheating constraints
12:45-14:00	Lunch	
14:00-15:00	Suvrat Raju	A canonical view of holography
15:00-15:30	Debika Chowdhury	Initial conditions for inflation
15:30-15:50	H. V. Ragavendra	Just enough inflation
15:50-16:10	Karthik Rajeev	Generalized Schwinger effect and cosmological particle production
16:10-16:30	Aneesh P. B.	Conserved charges in asymptotically de Sitter spacetimes
16:30-17:00	High tea	
17:00-18:00	Bala Iyer	<b>Brahmagupta Colloquium:</b> Experiments driving theory: The two-body problem in general relativity

**Thursday, January 23**

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
09:00-10:00	Anshuman Maharana	Inflation in string theory
10:00-10:30	T. R. Govindarajan	What if photon has a mass?
10:30-11:00	Coffee break	
11:00-12:00	Nishikanta Khandai	Cosmological hydrodynamical simulations of structure formation
12:00-13:00	Sukanta Bose	What can GWs tell us about the densest form of matter, the universe's expansion and extra dimensions?
13:00-14:00	Lunch	
14:00-15:00	Amitabh Virmani	QNMs of exotic compact objects
15:00-15:30	P. Ajith	Gravitational lensing of gravitational waves
15:30-16:00	Coffee break	
16:00-16:30	Shasvath Kapadia	Compact binary merger rates from LIGO-Virgo's first and second observing runs
16:30-17:00	M. Saleem	Multi-messenger astronomy using GWs

**Friday, January 24**

<b>Time</b>	<b>Speaker</b>	<b>Title</b>
09:00-10:00	Chandra Kant Mishra	Testing general relativity using gravitational waves
10:00-10:30	Sumanta Chakraborty	Strong cosmic censorship conjecture
10:30-11:00	Coffee break	
11:00-12:00	Shiv Sethi	Cosmological implications of alternative dark matter
12:00-12:30	Bidisha Chakraborty	Non-linear Langevin dynamics via holography
12:30-13:00	Shubroneel Chakrabarti	Generalized Garfinkle-Vachaspati transformation with dilaton
13:00-14:00	Lunch	
14:00-15:00	Archana Pai	Updates from LIGO-Virgo observing runs
15:00-15:20	Divyajyoti	Astrophysics of higher order modes
15:20-15:40	Sayantani Datta	Parameterized tests of general relativity with multi-band observations of gravitational waves
15:40-16:00	Pankaj Saha	On the equation of state during reheating
16:00-17:00	Vote of thanks, followed by coffee	