

Programme

Day 1	07 November 2024 (Thursday)		Venue: Bangamata Sheikh Fazilatunnesa Mujib Convention Hall, BSMMU, Minto Road
	09:00 – 09:30	Guests take seats	
	10:00 – 11:00	Inauguration Ceremony	
	Welcome Address	Professor Md. Kamrul Hassan, Organizing Secretary	
	Address by the Chief Patron	Professor Niaz Ahmed Khan, Vice Chancellor, University of Dhaka	
	Reminiscence of S. N. Bose	Partha Ghose, Former Professor, SNBNCBS, Kolkata, India	
	Address by the Special Guest	Professor Wahiduddin Mahmud, Honourable Education Advisor, Government of the People's Republic of Bangladesh	
	Address by the Chief Guest	Prof. Dr. Muhammad Yunus, Honourable Chief Advisor, Government of the People's Republic of Bangladesh	
	Vote of Thanks	Professor Supriya Saha, Convenor	
	11:00 – 11:20	Refreshments	
	11:20 – 13:35	Session I: Inaugural Session Session Chair: Professor Saleh Hasan Naqib	
	11:20 – 12:05	Inaugural Speech – 1: The Story of Bose, Photon Spin and Indistinguishability - Partha Ghose	
	12:05 – 12:50	Inaugural Speech - 2: Science and Reason in the Age of Unreason - Pervez Hoodbhoy	
	12:50 – 13:35	Inaugural Speech – 3: S N Bose : An All Round Source of Inspiration For Us - Muhammad Ibrahim	
	13:35 – 14:15	Lunch Break	
	14:15 – 15:45	Session II Session Chair : Professor Hilda Cerdeira	
	14:15 – 14:45	Invited Talk 1	Satyendranath Bose: His Education, Teaching & Research - Saifur Rahman
	14:45 – 15:15	Invited Talk 2	Harnessing Electromagnetic Wave using Plasmonic Metamaterials - Abul K. Azad
	15:15 – 15:45	Invited Talk 3	NASA Technologies for Space Exploration - Goutam Chattopadhyay
	15:45 – 16:05	Tea Break	
	16:05 – 17:05	Session III Session Chair : Professor Sumathi Rao	
	16:05 – 16:35	Invited Talk 4	Discovery of Higgs Boson at the Large Hadron Collider in CERN - Sunanda Banerjee
	16:35 – 17:05	Invited Talk 5	Anomalous Fluctuations in Systems with Broken Time-reversal Symmetry and Centre-of-mass Conservation - Punyabrata Pradhan

Day 2	08 November 2024 (Friday)		Venue: Nabab Nawab Ali Chowdhury Senate Bhaban, University of Dhaka
09:00 – 10:50	Session IV: Online Session Session Chair: Professor Kevin Mitchell		
9.00 – 9.40	Keynote Speech 1	Statistical Physics, Complex Networks and Control Theory - Raissa D'Souza	
9.40 – 10.20	Keynote Speech 2	Symmetry Breaking and Topological Excitations in Spinor Bose-Einstein Condensates - Masahito Ueda	
10:20 – 10:50	Invited Talk 6	J C Bose & S N Bose : Kinship, Scientific Odyssey, Legacy and Beyond - Parul Chakrabarti	
10:50 – 11:10	Tea Break		
11:10 – 12:55	Session V: Professor A. M. Harun ar Rashid Memorial Session Session Chair: Professor Pervez Hoodbhoy		
11:10 – 11:55	Plenary Talk 1	New Frontiers in Topological Quantum Matter - M. Zahid Hasan	
11:55 – 12:25	Invited Talk 7	Abhishek Dhar	
12:25 – 12:55	Invited Talk 8	Chaotic Advection in Active Nematics - Kevin Mitchell	
12:55--14:30	Lunch Break		
14:30 – 16:00	Poster Session		
14:30 – 16:00	Tea Break		
16:00 – 17:10	Session VI Session Chair: Professor Syamal K Dana		
16:00 – 16:30	Invited Talk 9	Phase Transitions in Swarmalators: explosive or second order? - Hilda A. Cerdeira	
16:30 – 17:00	Invited Talk 10	High-Tc cuprates: where is the glue? - S. H. Naqib	

Day 3	09 November 2024 (Saturday)	Venue: Nabab Nawab Ali Chowdhury Senate Bhaban, University of Dhaka	
09:00 – 10:40	Session VII: Online Session Session Chair : Professor Zahid Hasan		
09:00 – 10:00	Conference Speech	From the Birth of Quantum Indistinguishability and Quantum Statistics to the Achievement of Bose-Einstein Condensation in Atomic Gases - William Daniel Phillips	
10:00 – 10:40	Keynote Speech 3	Bose Gases with Dipolar Interactions in Two Dimensions - Gyu-Boong Jo	
10:40 – 11:00	Tea Break		
11:00 – 12:45	Session VIII: Professor A K M Shah Newaz Memorial Session Session Chair: Professor Sunanda Banerjee		
11:00 – 11:45	Plenary Talk 2	Gravitational Wave Tails from Soft Theorem - Ashoke Sen	
11:45 – 12:15	Invited Talk 12	Mixing of the photon with axion and axion-like particles - Sourov Roy	
12:15 – 12:45	Invited Talk 13	Symmetry and Solution Generation in General Relativity: From Lie Groups to Black Holes - Mohammad M Akbar	
12:45 – 13:40	Lunch Break		
13:40– 15:10	Session VIII: Session Chair: Dr. Subhro Bhattacharjee		
13:40 – 14:10	Invited Talk 14	Tuning the Local Environment of Nanoscale Materials for a Sustainable Future - Talat S. Rahman	
14:10 – 14:40	Invited Talk 15	Dipolar Bose-Einstein Condensates - Muhammad Asad Uz Zaman	
14:40 – 15:10	Invited Talk 16	Beyond Bose-Einstein Statistics : Majoranas and Parafermions -Sumathi Rao	
15:10 – 15:30	Tea Break		
15:30 –17:00	Session IX: Professor Lalit Mohan Nath Memorial Session Session Chair: Dr. Rajdeep Sensarma		
15:30 – 16:00	Invited Talk 17	Integrable Systems: From water to Bose-Einstein condensate - Mahmood ul Hassan	
16:00 – 16:30	Invited Talk 18	Tipping Phenomena in Nature - Syamal K. Dana	
16:30 – 17:00	Invited Talk 19	Out-of-time-order Correlators and Chaos in Quantum Billiards - Tibra Ali	

Day 4	10 November 2024 (Sunday)	Venue: Nabab Nawab Ali Chowdhury Senate Bhaban, University of Dhaka	
09:00 – 11:00	Session X: Session Chair: Professor Abhishek Dhar		
09:00 – 09:30	Invited Talk 20	Critical Transitions in Complex Dynamical Systems: Theory and Applications to Ecosystems and Climate - Ulrike Feudel	
09:30 – 10:00	Invited Talk 21	Protein/Protein and Protein/DNA Interactions: insight from in silico study - Narayan Prasad Adhikari	
10:00 – 10:30	Invited Talk 22	Photoexcited Electrons' Transport in Metal-oxides: Polaron formation - Muhammad N. Huda	
10:30 – 11:00	Invited Talk 23	Subhro Bhattacharjee	
11:00 – 11:20	Tea Break		
11:20 – 13:20	Session X: Session Chair: Professor Tibra Ali		
11:20 – 11:50	Invited Talk 24	The Higgs Boson: the Particle which Stands Out in Fundamental Physics - Biswarup Mukhopadhyaya	
11:50 – 12:20	Invited Talk 25	Rajdeep Sensarma	
11:20 – 12:50	Invited Talk 26	Kramers-Wannier Duality in Non-abelian Ising Models - Nafiz Ishtiaque*	
12:50 – 13:20	Invited Talk 27	Infrafield effects violate Landau Yang Theorem - M Arshad Momen	
13:20 – 14:00	Lunch Break		
14:00 – 16:00	Session X: Session Chair: Professor M Arshad Momen		
14:00 – 14:30	Invited Talk 28	Non-Monotonic Nuclear Potentials from Energy Density Functional Methods - Abdullah Shams Bin Tariq	
14:30 – 15:00	Invited Talk 29	Exploring Electronic and Magnetic properties of Pristine, Strained, and Defected MXenes - Gopi Chandra Kaphle	
15:00 – 15:30	Invited Talk 30	Saurabh Basu	
15:30 – 16:00	Invited Talk 30	Instantons and the Quantum Tunneling of a Composite System Confined within a Double Potential Well - Parvez Hoodbhoy	
14:00 – 15:15	Session XI: Contributory Session [Parallel Session] Session Chair: Professor Narayan Prasad Adhikari		
14:00 – 14:15	Contributory Talk 1	Can we engineer the uncontrollable? Controlling noise via optimal quantum control to boost compass sensitivity in biradical spin systems - Farhan Tanvir Chowdhury	
14:15 – 14:30	Contributory Talk 2	First Epitaxial Synthesis and Characterization of MnSb/InSb Hybrid Structures on GaAs (111) B for Spin-FET Applications - Md Faysal Kabir	
14:30 – 14:45	Contributory Talk 3	Back to the Origins of Brane-Antibrane Inflation - Ahmed Rakin Kamal	

14:45 – 15:00	Contributory Talk 4	Investigation of Pore Formation and Its Evolution to Vesicle Burst: Interaction of AMP with GUVs in Presence of Osmotic Pressure -M. M. Billah
15:00 – 15:15	Contributory Talk 5	Development of A Portable LED-based Light Source with Selectable Wavelengths, Intensities and Illumination Periods for Photophysical and Photochemical Studies - Syed Farid Uddin Farhad
16:00 – 16:20	Tea Break	
16:20 -17:00	Discussion and Closing Ceremony	